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## CEYLON AND BURMA.

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### RHYNCHOTA.—Vol. VII.

HOMOPTERA: APPENDIX.

HETEROPTERA: ADDENDA.

BY

W. L. DISTANT.

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## SYSTEMATIC INDEX.

|   | Page |                                   | Page |
|---|------|-----------------------------------|------|
| Fam. JASSIDÆ .....                      | 1    | Subfam. 4. <i>Gyponinae</i> ..... | 16   |
| Subfam. 3. <i>Tettigoniellinae</i> .... | 1    | Penthimia, <i>Germ.</i> .....     | 16   |
| Tettigoniella, <i>Jacobi</i> .....      | 1    | nilgiriensis, <i>Dist.</i> .....  | 16   |
| insignior, <i>Dist.</i> .....           | 1    | montana, <i>Dist.</i> .....       | 17   |
| gemina, <i>Dist.</i> .....              | 2    | badia, <i>Dist.</i> .....         | 17   |
| thalia, <i>Dist.</i> .....              | 2    | vittatifrons, <i>Dist.</i> .....  | 17   |
| hopinensis, <i>Dist.</i> .....          | 3    | majuscula, <i>Dist.</i> .....     | 18   |
| sylvanella, <i>Dist.</i> .....          | 3    | variabilis, <i>Dist.</i> .....    | 18   |
| kharavela, <i>Dist.</i> .....           | 4    | funebria, <i>Dist.</i> .....      | 19   |
| Apphia, <i>Dist.</i> .....              | 4    | thoracica, <i>Dist.</i> .....     | 19   |
| burmanica, <i>Dist.</i> .....           | 5    | flavocapitata, <i>Dist.</i> ..... | 20   |
| Omaranus, <i>Dist.</i> .....            | 5    | mudonensis, <i>Dist.</i> .....    | 20   |
| typicus, <i>Dist.</i> .....             | 6    | nitida, <i>Dist.</i> .....        | 21   |
| Kolla, <i>Dist.</i> .....               | 6    | fraterna, <i>Dist.</i> .....      | 21   |
| maculifrons, <i>Schmidt</i> ....        | 6    | quadrinotata, <i>Dist.</i> .....  | 21   |
| raja, <i>Dist.</i> .....                | 7    | noctua, <i>Dist.</i> .....        | 22   |
| pronotalis, <i>Dist.</i> .....          | 8    | attenuata, <i>Dist.</i> .....     | 22   |
| ganesa, <i>Dist.</i> .....              | 8    | Tambila, <i>Dist.</i> .....       | 23   |
| diaphana, <i>Dist.</i> .....            | 9    | opulenta, <i>Dist.</i> .....      | 23   |
| tigrina, <i>Dist.</i> .....             | 9    | fletcheri, <i>Dist.</i> .....     | 23   |
| kodaiana, <i>Dist.</i> .....            | 9    | gravelyi, <i>Dist.</i> .....      | 23   |
| eliyana, <i>Dist.</i> .....             | 10   | conspersa, <i>Dist.</i> .....     | 24   |
| atronotata, <i>Dist.</i> .....          | 10   | Malichus, <i>Dist.</i> .....      | 24   |
| Euacanthus, <i>Burm.</i> .....          | 11   | capitatus, <i>Dist.</i> .....     | 25   |
| militaris, <i>Dist.</i> .....           | 11   | Neodartus, <i>Melich.</i> .....   | 25   |
| bellus, <i>Dist.</i> .....              | 11   | Vulturnus, <i>Kirk.</i> .....     | 26   |
| Mainda, <i>Dist.</i> .....              | 11   | ornatus, <i>Dist.</i> .....       | 26   |
| Pisachoides, <i>Dist.</i> .....         | 12   | speciosus, <i>Dist.</i> .....     | 27   |
| Preta, <i>Dist.</i> ....                | 12   | Vangama, <i>Dist.</i> .....       | 27   |
| Bharata, <i>Dist.</i> .....             | 12   | Traiguma, <i>Dist.</i> .....      | 27   |
| insignis, <i>Dist.</i> .....            | 12   | verticalis, <i>Dist.</i> .....    | 27   |
| Mileewa, <i>Dist.</i> .....             | 13   | Gurawa, <i>Dist.</i> .....        | 28   |
| Ujna, <i>Dist.</i> .....                | 13   | Ahenobarbus, <i>Dist.</i> .....   | 28   |
| Faenius, <i>Dist.</i> .....             | 14   | assamensis, <i>Dist.</i> .....    | 28   |
| lynchi, <i>Dist.</i> .....              | 14   | Subfam. 5. <i>Jassinæ</i> .....   | 29   |
| butleri, <i>Dist.</i> .....             | 15   | Chudania, <i>Dist.</i> .....      | 29   |
| Shaddai, <i>Dist.</i> .....             | 15   | Mukaria, <i>Dist.</i> .....       | 29   |
| typicus, <i>Dist.</i> .....             | 15   |                                   |      |

|                                    | Page |                                    | Page |
|------------------------------------|------|------------------------------------|------|
| Mohunia, <i>Dist.</i> .....        | 29   | brevis, <i>Walk.</i> .....         | 49   |
| modesta, <i>Dist.</i> .....        | 29   | ostentus, <i>Dist.</i> .....       | 49   |
| Hecalus, <i>Stål</i> .....         | 29   | Aeternus, <i>Dist.</i> .....       | 50   |
| facialis, <i>Dist.</i> .....       | 29   | hieroglyphicus, <i>Dist.</i> ....  | 50   |
| capitatus, <i>Dist.</i> .....      | 30   | Phrynomorphus, <i>Curtis</i> ...   | 51   |
| godavariensis, <i>Dist.</i> .....  | 30   | ootacamundus, <i>Dist.</i> ....    | 51   |
| Parabolocratus, <i>Fieb.</i> ..... | 30   | olivaceescens, <i>Dist.</i> .....  | 52   |
| lutescens, <i>Dist.</i> .....      | 31   | coronatus, <i>Dist.</i> .....      | 52   |
| Bumizana, <i>Dist.</i> .....       | 32   | Trebellius, <i>Dist.</i> .....     | 52   |
| elongata, <i>Dist.</i> .....       | 32   | albifrons, <i>Dist.</i> .....      | 53   |
| Nirvana, <i>Kirk.</i> .....        | 33   | Prasutagus, <i>Dist.</i> .....     | 53   |
| insignis, <i>Dist.</i> .....       | 33   | puchellus, <i>Dist.</i> .....      | 53   |
| Ophiuchus, <i>Dist.</i> .....      | 33   | Phlepsius, <i>Fieb.</i> .....      | 54   |
| princeps, <i>Dist.</i> .....       | 34   | Xestocephalus, <i>Van Duz.</i> ..  | 54   |
| Kana, <i>Dist.</i> .....           | 34   | relatus, <i>Dist.</i> .....        | 54   |
| signata, <i>Dist.</i> .....        | 34   | nilgiriensis, <i>Dist.</i> .....   | 55   |
| illuminata, <i>Dist.</i> .....     | 35   | transversus, <i>Dist.</i> .....    | 55   |
| modesta, <i>Dist.</i> .....        | 36   | dissimilis, <i>Dist.</i> .....     | 55   |
| Didius, <i>Dist.</i> .....         | 36   | Banus, <i>Dist.</i> .....          | 55   |
| sexualis, <i>Dist.</i> .....       | 36   | maculosus, <i>Dist.</i> .....      | 55   |
| Platyretus, <i>Melich.</i> .....   | 37   | Dio, <i>Dist.</i> .....            | 56   |
| connexus, <i>Dist.</i> .....       | 37   | facialis, <i>Dist.</i> .....       | 56   |
| himalayanus, <i>Dist.</i> .....    | 38   | Ootacamundus, <i>Dist.</i> .....   | 57   |
| albosignatus, <i>Dist.</i> .....   | 38   | typicus, <i>Dist.</i> .....        | 57   |
| Acropona, <i>Melich.</i> .....     | 39   | minutus, <i>Dist.</i> .....        | 58   |
| Gessius, <i>Dist.</i> .....        | 39   | Lampridius, <i>Dist.</i> .....     | 58   |
| Nakula, <i>Dist.</i> .....         | 39   | spectabilis, <i>Dist.</i> .....    | 58   |
| multicolor, <i>Dist.</i> .....     | 39   | Divitiacus, <i>Dist.</i> .....     | 59   |
| Carvaka, <i>Dist.</i> .....        | 40   | primus, <i>Dist.</i> .....         | 59   |
| picturata, <i>Dist.</i> .....      | 40   | Nephotettix, <i>Matsum.</i> .....  | 60   |
| thoracica, <i>Dist.</i> .....      | 41   | Eutettix, <i>Van Duz.</i> .....    | 60   |
| modesta, <i>Dist.</i> .....        | 41   | lugubris, <i>Dist.</i> .....       | 60   |
| ochrophara, <i>Dist.</i> .....     | 41   | bengalensis, <i>Dist.</i> .....    | 60   |
| Drabescus, <i>Stål.</i> .....      | 42   | Divus, <i>Dist.</i> .....          | 61   |
| Kutara, <i>Dist.</i> .....         | 42   | Gunghuyana, <i>Dist.</i> .....     | 61   |
| nigrofacialis, <i>Dist.</i> .....  | 42   | cingalensis, <i>Dist.</i> .....    | 62   |
| Goniagnathus, <i>Fieb.</i> .....   | 43   | Paralimnus, <i>Matsum.</i> .....   | 62   |
| fumosus, <i>Dist.</i> .....        | 43   | facialis, <i>Dist.</i> .....       | 62   |
| bicolor, <i>Dist.</i> .....        | 43   | lefroiy, <i>Dist.</i> .....        | 63   |
| obesus, <i>Dist.</i> .....         | 43   | Neoliturus, <i>Dist.</i> .....     | 63   |
| Thagria, <i>Melich.</i> .....      | 44   | Mahalana, <i>Dist.</i> .....       | 63   |
| capitata, <i>Dist.</i> .....       | 44   | fidelis, <i>Dist.</i> .....        | 63   |
| difformis, <i>Dist.</i> .....      | 44   | lugubris, <i>Dist.</i> .....       | 64   |
| Varta, <i>Dist.</i> .....          | 44   | Scaphoideus, <i>Uhler</i> .....    | 64   |
| Coroticus, <i>Dist.</i> .....      | 45   | redundans, <i>Dist.</i> .....      | 64   |
| tessellatus, <i>Dist.</i> .....    | 45   | nutans, <i>Dist.</i> .....         | 65   |
| Cunedda, <i>Dist.</i> .....        | 46   | hieroglyphicus, <i>Dist.</i> ....  | 65   |
| phaeops, <i>Dist.</i> .....        | 46   | brachycephalus, <i>Dist.</i> ....  | 66   |
| Sabima, <i>Dist.</i> .....         | 46   | pallifrons, <i>Dist.</i> .....     | 66   |
| aryana, <i>Dist.</i> .....         | 46   | assamensis, <i>Dist.</i> .....     | 67   |
| Jassus, <i>Fabr.</i> .....         | 47   | stigmaticus, <i>Dist.</i> .....    | 67   |
| fryeri, <i>Dist.</i> .....         | 47   | Hussa, <i>Dist.</i> .....          | 68   |
| albororatus, <i>Dist.</i> .....    | 48   | insignis, <i>Dist.</i> .....       | 68   |
| coonorensis, <i>Dist.</i> .....    | 48   | Campbellinella, <i>Dist.</i> ..... | 69   |
| excelsus, <i>Dist.</i> .....       | 49   | illustrata, <i>Dist.</i> .....     | 69   |

|                                    | Page |                                       | Page |
|------------------------------------|------|---------------------------------------|------|
| <i>Viridomarus, Dist.</i> .....    | 69   | <i>terminalis, Dist.</i> .....        | 92   |
| <i>capitatus, Dist.</i> .....      | 70   | <i>rubronotata, Dist.</i> .....       | 92   |
| <i>Bituitus, Dist.</i> .....       | 70   | <i>fuscofasciata, Dist.</i> .....     | 92   |
| <i>projectus, Dist.</i> .....      | 71   | <i>atropurpurea, Dist.</i> .....      | 92   |
| <i>Paternus, Dist.</i> .....       | 71   | <i>nigroscutellata, Dist.</i> ....    | 93   |
| <i>pusanus, Dist.</i> .....        | 71   | <i>devastans, Dist.</i> .....         | 93   |
| <i>Volusenus, Dist.</i> .....      | 72   | <i>nagpurensis, Dist.</i> .....       | 93   |
| <i>lahorensis, Dist.</i> .....     | 72   | <i>radha, Dist.</i> .....             | 93   |
| <i>Zizyphoides, Dist.</i> .....    | 73   | <i>Empoascanara, Dist.</i> .....      | 94   |
| <i>indicus, Dist.</i> .....        | 73   | <i>prima, Dist.</i> .....             | 94   |
| <i>fraternus, Dist.</i> .....      | 74   | <i>binotata, Dist.</i> .....          | 94   |
| <i>Nandidrug, Dist.</i> .....      | 74   | <i>Paivanana, Dist.</i> .....         | 95   |
| <i>speciosum, Dist.</i> .....      | 75   | <i>durga, Dist.</i> .....             | 96   |
| <i>viridicans, Dist.</i> .....     | 75   | <i>Eupteryx, Curt.</i> .....          | 96   |
| <i>Allectus, Dist.</i> .....       | 75   | <i>sanguinolenta, Dist.</i> .....     | 96   |
| <i>notatus, Dist.</i> .....        | 76   | <i>paivana, Dist.</i> .....           | 97   |
| <i>Crispina, Dist.</i> .....       | 76   | <i>Camulus, Dist.</i> .....           | 97   |
| <i>nigristigma, Dist.</i> .....    | 77   | <i>ornatus, Dist.</i> .....           | 97   |
| <i>Aconura, Leth.</i> .....        | 77   | <i>bellulus, Dist.</i> .....          | 98   |
| <i>atrata, Dist.</i> .....         | 77   | <i>modestus, Dist.</i> .....          | 98   |
| <i>Galerius, Dist.</i> .....       | 78   | <i>Augulus, Dist.</i> .....           | 98   |
| <i>indicatrix, Dist.</i> ..        | 78   | <i>typicus, Dist.</i> .....           | 99   |
| <i>aberrans, Dist.</i> .....       | 79   | <i>Typhlocyba, Germ.</i> .....        | 99   |
| <i>Maximianus, Dist.</i> .....     | 79   | <i>gemmata, Dist.</i> .....           | 99   |
| <i>notatus, Dist.</i> .....        | 79   | <i>ornatula, Dist.</i> .....          | 100  |
| <i>cephalicus, Dist.</i> .....     | 80   | <i>diana, Dist.</i> .....             | 100  |
| <i>Deltocephalus, Burm.</i> .....  | 81   | <i>atrosignata, Dist.</i> .....       | 100  |
| <i>nigrifacialis, Dist.</i> .....  | 81   | <i>guttulata, Dist.</i> .....         | 101  |
| <i>darjilingensis, Dist.</i> ..... | 82   | <i>coerulescens, Dist.</i> .....      | 101  |
| <i>coloratus, Dist.</i> .....      | 82   | <i>sanguinalis, Dist.</i> .....       | 101  |
| <i>campbelli, Dist.</i> .....      | 82   | <i>cardinalis, Dist.</i> .....        | 101  |
| <i>butleri, Dist.</i> .....        | 83   | <i>atrifrons, Dist.</i> .....         | 102  |
| <i>capitatus, Dist.</i> .....      | 83   | <i>dubia, Dist.</i> .....             | 102  |
| <i>trimaculatus, Dist.</i> ..      | 83   | <i>rubrostriata, Dist.</i> .....      | 102  |
| <i>fusco-varius, Dist.</i> .....   | 83   | <i>rufuscula, Dist.</i> .....         | 103  |
| <i>Postumus, Dist.</i> .....       | 84   | <i>spectra, Dist.</i> .....           | 103  |
| <i>facialis, Dist.</i> .....       | 84   | <i>opulenta, Dist.</i> .....          | 103  |
| <i>Orosius, Dist.</i> .....        | 85   | <i>straminea, Dist.</i> .....         | 104  |
| <i>albicinctus, Dist.</i> .....    | 85   | <i>delicatula, Dist.</i> .....        | 104  |
| <i>Leofa, Dist.</i> .....          | 86   | <i>incerta, Dist.</i> .....           | 104  |
| <i>mysorensis, Dist.</i> .....     | 86   | <i>Aguriahana, Dist.</i> .....        | 105  |
| <i>affinis, Dist.</i> .....        | 87   | <i>metallica, Dist.</i> .....         | 105  |
| <i>sanguinalis, Dist.</i> .....    | 87   | <i>Empoanara, Dist.</i> .....         | 106  |
| <i>unicolor, Dist.</i> .....       | 88   | <i>militaris, Dist.</i> .....         | 106  |
| <i>pedestris, Dist.</i> .....      | 88   | <i>sternalis, Dist.</i> .....         | 107  |
| <i>Gunhilda, Dist.</i> .....       | 88   | <i>lineolata, Dist.</i> .....         | 107  |
| <i>noctua, Dist.</i> .....         | 88   | <i>Chikkaballapura, Dist.</i> ....    | 107  |
| <i>Subfam. 6. Typhlocybinae</i> .. | 89   | <i>maculosa, Dist.</i> .....          | 108  |
| <i>Bolanus, Dist.</i> .....        | 89   | <i>quinquemaculata, Dist.</i> ..      | 108  |
| <i>bæticus, Dist.</i> .....        | 89   | <i>Anomiana, Dist.</i> .....          | 109  |
| <i>Bolanusoides, Dist.</i> .....   | 90   | <i>longula, Dist.</i> .....           | 109  |
| <i>heros, Dist.</i> .....          | 90   |                                       |      |
| <i>Empoasca, Walsh.</i> .....      | 91   | <i>Fam. PENTATOMIDÆ</i> .....         | 110  |
| <i>thea, Dist.</i> .....           | 91   | <i>Subfam. 1. Plataspidinae</i> ..... | 110  |

|  | Page |   | Page |
|--|------|---|------|
| Brachyplatys, <i>Boisd.</i> . . . .    | 110  | Adria, <i>Stål</i> . . . . .            | 127  |
| nitidus, <i>Westw.</i> . . . .         | 110  | Æliomorpha, <i>Stål</i> . . . . .       | 127  |
| Tiarocoris, <i>Voll.</i> . . . .       | 111  | fletcheri, <i>Dist.</i> . . . .         | 127  |
| suffusus, <i>Dist.</i> . . . .         | 111  | pusana, <i>Dist.</i> . . . .            | 128  |
| Coptosoma, <i>Lap.</i> . . . .         | 111  | Ochrophara, <i>Stål</i> . . . . .       | 128  |
| marginifrons, <i>Dist.</i> . . . .     | 111  | Halyomorpha, <i>Mayr</i> . . . .        | 129  |
| breddini, <i>Dist.</i> . . . .         | 112  | illuminata, <i>Dist.</i> . . . .        | 129  |
| ostensum, <i>Dist.</i> . . . .         | 112  | fletcheri, <i>Dist.</i> . . . .         | 129  |
| haragamensis, <i>Dist.</i> . . . .     | 112  | Tolumnia, <i>Stål</i> . . . . .         | 130  |
| campbelli, <i>Dist.</i> . . . .        | 113  | Carpocoris, <i>Kol.</i> . . . .         | 130  |
| fuscomaculatum, <i>Dist.</i> . .       | 113  | Dolycoris, <i>Muls. &amp; Rey</i> . . . | 130  |
| liliputianum, <i>Dist.</i> . . . .     | 114  | Scylax, <i>Dist.</i> . . . .            | 130  |
| variegatum, <i>Herr.-Sch.</i> . .      | 114  | Sepontia, <i>Stål</i> . . . . .         | 131  |
| fletcheri, <i>Dist.</i> . . . .        | 114  | nigrofusca, <i>Dist.</i> . . . .        | 131  |
| lebongensis, <i>Dist.</i> . . . .      | 115  | Eusarcocoris, <i>Puton</i> . . . .      | 131  |
| Subfam. 2. <i>Scutellerinæ</i> . . . . | 116  | major, <i>Dist.</i> . . . .             | 132  |
| Scutellera, <i>Lam.</i> . . . .        | 116  | Hermolaus, <i>Dist.</i> . . . .         | 132  |
| Chrysocoris, <i>Hahn</i> . . . .       | 116  | robustus, <i>Dist.</i> . . . .          | 132  |
| Hotea, <i>Amy. &amp; Serv.</i> . . . . | 116  | horni, <i>Bredd.</i> . . . .            | 133  |
| Subfam. 3. <i>Cydninæ</i> . . . . .    | 116  | Carbula, <i>Stål</i> . . . . .          | 133  |
| Lactistes, <i>Schödté</i> . . . . .    | 116  | aliena, <i>Dist.</i> . . . .            | 133  |
| latus, <i>Dist.</i> . . . .            | 116  | Neocarbula, <i>Dist.</i> . . . .        | 134  |
| Cydnus, <i>Fabr.</i> . . . .           | 117  | capitata, <i>Dist.</i> . . . .          | 134  |
| ater, <i>Dist.</i> . . . .             | 117  | Bainbriggeanus, <i>Dist.</i> . . . .    | 135  |
| Macroscytus, <i>Fieb.</i> . . . .      | 118  | fletcheri, <i>Dist.</i> . . . .         | 135  |
| Geotomus, <i>Muls. &amp; Rey</i> . .   | 118  | Plautia, <i>Stål</i> . . . . .          | 136  |
| acrostictus, <i>Dist.</i> . . . .      | 118  | picturata, <i>Dist.</i> . . . .         | 136  |
| Chilocoris, <i>Mayr</i> . . . . .      | 119  | Antestia, <i>Stål</i> . . . . .         | 136  |
| Chilocoristoides, <i>Dist.</i> . . .   | 119  | Gynenica, <i>Dall.</i> . . . .          | 136  |
| Subfam. 4. <i>Pentatominæ</i> . . .    | 119  | Agonoscelis, <i>Spin.</i> . . . .       | 137  |
| Div. 1. <i>Halyaria</i> . . . . .      | 119  | campbelli, <i>Dist.</i> . . . .         | 137  |
| Dalpada, <i>Amy. &amp; Serv.</i> . . . | 119  | Eurydema, <i>Lap.</i> . . . .           | 137  |
| tauriformis, <i>Dist.</i> . . . .      | 120  | Madates, <i>Strand</i> . . . . .        | 137  |
| Erthesina, <i>Spin.</i> . . . .        | 120  | Compastes, <i>Stål</i> . . . . .        | 137  |
| aberrans, <i>Dist.</i> . . . .         | 121  | taurus, <i>Dist.</i> . . . .            | 137  |
| Haly, <i>Fabr.</i> . . . .             | 121  | Tropicoris, <i>Hahn</i> . . . . .       | 138  |
| Neonevisanus, <i>Dist.</i> . . . .     | 121  | Priassus, <i>Stål</i> . . . . .         | 138  |
| rugosus, <i>Dist.</i> . . . .          | 122  | Prionaca, <i>Dall.</i> . . . .          | 138  |
| Saontarana, <i>Dist.</i> . . . .       | 122  | nigrescens, <i>Dist.</i> . . . .        | 138  |
| burmanica, <i>Dist.</i> . . . .        | 122  | Degonetus, <i>Dist.</i> . . . .         | 139  |
| Asylana, <i>Dist.</i> . . . .          | 123  | Placosternum, <i>Amy. &amp; Serv.</i> . | 139  |
| punjabensis, <i>Dist.</i> . . . .      | 124  | ficusius, <i>Dist.</i> . . . .          | 139  |
| Phricodus, <i>Spin.</i> . . . .        | 124  | Amblycara, <i>Bergr.</i> . . . .        | 139  |
| hystrix, <i>Germ.</i> . . . .          | 124  | Catacanthus, <i>Spin.</i> . . . .       | 139  |
| Sciocoris, <i>Fallén</i> . . . . .     | 125  | Nezara, <i>Amy. &amp; Serv.</i> . . . . | 140  |
| luteo-fasciatus, <i>Dist.</i> . . .    | 125  | Piezodorus, <i>Fieb.</i> . . . .        | 140  |
| funnebris, <i>Dist.</i> . . . .        | 126  | Chaubattiana, <i>Dist.</i> . . . .      | 140  |
| nepalensis, <i>Dist.</i> . . . .       | 126  | rubrovittata, <i>Dist.</i> . . . .      | 141  |
| Caystrus, <i>Stål</i> . . . . .        | 126  | Menida, <i>Motsch.</i> . . . .          | 141  |
| scutellatus, <i>Dist.</i> . . . .      | 127  | Eurymenida, <i>Bergr.</i> . . . .       | 142  |
| Gulielmus, <i>Dist.</i> . . . .        | 127  | vallicola, <i>Bergr.</i> . . . .        | 142  |
|  |      | Khondana, <i>Dist.</i> . . . .          | 143  |
|  |      | Keriahana, <i>Dist.</i> . . . .         | 143  |
|  |      | Acesines, <i>Stål</i> . . . . .         | 144  |
|  |      | bambusana, <i>Dist.</i> . . . .         | 144  |



|  | Page |  | Page |
|--|------|--|------|
| Dunnius, <i>Dist.</i> .....                | 145  | Daclera, <i>Sign.</i> .....            | 162  |
| Iphiarusa, <i>Bredd.</i> .....             | 145  | levana, <i>Dist.</i> .....             | 162  |
| Subfam. 5. <i>Asopinæ</i> .....            | 146  | Euthetus, <i>Dall.</i> .....           | 163  |
| Cazira, <i>Amy. &amp; Serv.</i> .....      | 146  | pulcherrimus, <i>Bergr.</i> ....       | 163  |
| Anasida, <i>Karsch</i> .....               | 146  | khandalana, <i>Dist.</i> .....         | 163  |
| orientalis, <i>Dist.</i> .....             | 146  | nigrellus, <i>Dist.</i> .....          | 164  |
| Canthecona, <i>Amy. &amp; Serv.</i> ..     | 147  | fulvescens, <i>Dist.</i> .....         | 164  |
| Subfam. 6. <i>Tessaratominae</i> ....      | 147  | atomarius, <i>Dist.</i> .....          | 165  |
| Tessaratoma, <i>Lepell. &amp; Serv.</i> .. | 147  | Akbaratus, <i>Dist.</i> .....          | 165  |
| Subfam. 7. <i>Acanthosomatinae</i> ..      | 148  | fasciatus, <i>Dist.</i> .....          | 165  |
| Sastragala, <i>Amy. &amp; Serv.</i> ..     | 148  | fumosus, <i>Dist.</i> .....            | 166  |
| modesta, <i>Dist.</i> .....                | 148  | Hypselopus, <i>Burm.</i> .....         | 166  |
| Elasmucha, <i>Bergr.</i> .....             | 149  | pronotalis, <i>Dist.</i> .....         | 167  |
| albicincta, <i>Dist.</i> .....             | 149  | mimicus, <i>Dist.</i> .....            | 168  |
| tauriformis, <i>Dist.</i> .....            | 150  | Corizus, <i>Fall.</i> .....            | 168  |
| montandoni, <i>Dist.</i> .....             | 150  | parvипictus, <i>Dist.</i> .....        | 168  |
| Fam. CORÆIDÆ .....                         | 151  | subfasciatus, <i>Dist.</i> .....       | 169  |
| Ochrochira, <i>Stål</i> .....              | 151  | macropictus, <i>Dist.</i> .....        | 169  |
| Mictis, <i>Leach</i> .....                 | 151  | multimaculatus, <i>Dist.</i> ....      | 170  |
| formidabilis, <i>Dist.</i> .....           | 151  | pronotalis, <i>Dist.</i> ....          | 170  |
| Xyrophoreus, <i>Bredd.</i> .....           | 152  | imperialis, <i>Dist.</i> .....         | 170  |
| tonsor, <i>Bredd.</i> .....                | 153  | Agraphopus, <i>Stål</i> .....          | 171  |
| Anoplocnemis, <i>Stål</i> .....            | 153  | lethierryi, <i>Stål</i> .....          | 171  |
| binotata, <i>Dist.</i> .....               | 153  | orientalis, <i>Dist.</i> .....         | 172  |
| Petillia, <i>Stål</i> .....                | 154  | Serinettha, <i>Spin.</i> .....         | 172  |
| Homœocerus, <i>Burm.</i> ....              | 154  | Therapha, <i>Amy. &amp; Serr.</i> .... | 172  |
| apicicornis, <i>Dist.</i> .....            | 154  | diluta, <i>Dist.</i> .....             | 172  |
| picturatus, <i>Dist.</i> .....             | 155  | Fam. BERYTIDÆ .....                    | 173  |
| borealis, <i>Dist.</i> .....               | 155  | Taprobanus, <i>Dist.</i> .....         | 173  |
| australis, <i>Dist.</i> .....              | 155  | gravelyi, <i>Dist.</i> .....           | 173  |
| indus, <i>Dist.</i> .....                  | 156  | Iterduca, <i>Dist.</i> .....           | 174  |
| Aschistocoris, <i>Bergr.</i> .....         | 156  | prima, <i>Dist.</i> .....              | 174  |
| Physomerus, <i>Burm.</i> .....             | 157  | Megalomerium, <i>Fieb.</i> .....       | 175  |
| Pendulinus, <i>Thunb.</i> .....            | 157  | pertenerum, <i>Bredd.</i> .....        | 176  |
| Plinactus, <i>Stål</i> .....               | 157  | Capys, <i>Stål</i> .....               | 177  |
| Brunsellius, <i>Dist.</i> .....            | 157  | gracilis, <i>Dist.</i> .....           | 177  |
| elongatus, <i>Dist.</i> .....              | 157  | Metacanthus, <i>Costa</i> .....        | 178  |
| Cletus, <i>Stål</i> .....                  | 158  | bihamatus, <i>Dist.</i> .....          | 178  |
| borillus, <i>Dist.</i> .....               | 158  | Hubertiella, <i>Kirk.</i> .....        | 178  |
| Haidara, <i>Dist.</i> .....                | 158  | Fam. LYGÆIDÆ .....                     | 179  |
| Craspedum, <i>Amy. &amp; Serv.</i> ..      | 159  | Lygæus, <i>Fabr.</i> ....              | 179  |
| campbelli, <i>Dist.</i> .....              | 159  | campbelli, <i>Dist.</i> .....          | 179  |
| butleri, <i>Dist.</i> .....                | 159  | incertus, <i>Walk.</i> .....           | 179  |
| Clavigralla, <i>Spin.</i> .....            | 159  | Graptostethus, <i>Stål</i> .....       | 179  |
| Neohoplolomia, <i>Dist.</i> .....          | 159  | Aspilocoryphus, <i>Stål</i> .....      | 180  |
| typica, <i>Dist.</i> .....                 | 160  | fraternus, <i>Dist.</i> .....          | 180  |
| Psilolomia, <i>Bredd.</i> .....            | 161  | signatus, <i>Dist.</i> .....           | 180  |
| Leptocoris, <i>Latr.</i> .....             | 161  | Melanotelus, <i>Reut.</i> .....        | 180  |
| lepada, <i>Bredd.</i> .....                | 161  | sordidus, <i>Dist.</i> .....           | 180  |
| Acestra, <i>Dall.</i> .....                | 162  | Lygæosoma, <i>Spin.</i> .....          | 181  |
|  |      | contaminatum, <i>Dist.</i> ....        | 181  |
|  |      | Cænocoris, <i>Fieb.</i> .....          | 181  |
|  |      | sanguinarius, <i>Stål</i> .....        | 181  |

|                                   | Page |                                    | Page |
|-----------------------------------|------|------------------------------------|------|
| Nysius, <i>Dall.</i> .....        | 181  | picturatus, <i>Dist.</i> .....     | 191  |
| Nysiodes, <i>Dist.</i> .....      | 182  | Locutius, <i>Dist.</i> .....       | 192  |
| typus, <i>Dist.</i> .....         | 182  | atratus, <i>Dist.</i> .....        | 192  |
| faustus, <i>Dist.</i> .....       | 183  | brunneus, <i>Dist.</i> .....       | 193  |
| Ninus, <i>Stål</i> .....          | 183  | pallescens, <i>Dist.</i> .....     | 193  |
| Cymus, <i>Hahn</i> .....          | 183  | Polycrates, <i>Stål</i> .....      | 194  |
| Domiduca, <i>Dist.</i> .....      | 184  | tibialis, <i>Dist.</i> .....       | 194  |
| exemplificata, <i>Dist.</i> ..... | 184  | uniformis, <i>Dist.</i> .....      | 194  |
| Ossipaga, <i>Dist.</i> .....      | 185  | Adauctus, <i>Dist.</i> .....       | 195  |
| ceylanica, <i>Dist.</i> .....     | 185  | nigrocapitatus, <i>Dist.</i> ..... | 195  |
| Macropes, <i>Motsch.</i> .....    | 186  | Fabulinus, <i>Dist.</i> .....      | 195  |
| femoralis, <i>Dist.</i> .....     | 186  | mysorensis, <i>Dist.</i> .....     | 195  |
| consobrinus, <i>Dist.</i> .....   | 186  | gemmatus, <i>Dist.</i> .....       | 196  |
| pronotalis, <i>Dist.</i> .....    | 186  | Thebanus, <i>Dist.</i> .....       | 197  |
| rufipes, <i>Dist.</i> .....       | 187  | antennatus, <i>Dist.</i> .....     | 197  |
| consimilis, <i>Dist.</i> .....    | 187  | Tropistethus, <i>Fieb.</i> .....   | 197  |
| abbreviatus, <i>Dist.</i> .....   | 187  | aurantiacus, <i>Dist.</i> .....    | 197  |
| Blissus, <i>Klug</i> .....        | 188  | Cligenes, <i>Dist.</i> .....       | 197  |
| latus, <i>Dist.</i> .....         | 188  | fraternus, <i>Dist.</i> .....      | 197  |
| Geocoris, <i>Fall.</i> .....      | 188  | Diniella, <i>Bergr.</i> .....      | 198  |
| lutulentus, <i>Dist.</i> .....    | 188  | insignis, <i>Dist.</i> .....       | 198  |
| flaviceps, <i>Burm.</i> .....     | 188  | Aphanus, <i>Lap.</i> .....         | 198  |
| rufipennis, <i>Dist.</i> .....    | 189  | lateralis, <i>Dist.</i> .....      | 198  |
| rutiloides, <i>Dist.</i> .....    | 189  | discoguttatus, <i>Dist.</i> .....  | 199  |
| erebus, <i>Dist.</i> .....        | 189  | ornatus, <i>Dist.</i> .....        | 199  |
| varipes, <i>Dist.</i> .....       | 190  | Metochus, <i>Scott</i> .....       | 200  |
| Geocoroides, <i>Dist.</i> .....   | 190  | illustris, <i>Dist.</i> .....      | 200  |
| polytretus, <i>Dist.</i> .....    | 190  | Paradieuches, <i>Dist.</i> .....   | 200  |
| Chauliops, <i>Scott</i> .....     | 191  | pallipes, <i>Dist.</i> .....       | 201  |
| Pamera, <i>Say</i> .....          | 191  | Dieuches, <i>Dohrn</i> .....       | 201  |
| Eucosmetus, <i>Bergr.</i> .....   | 191  | hypocrita, <i>Bergr.</i> .....     | 201  |
| nigronitens, <i>Dist.</i> .....   | 191  | Lethæus, <i>Dall.</i> .....        | 202  |
| Agunga, <i>Dist.</i> .....        | 191  | notabilis, <i>Dist.</i> .....      | 202  |
| Appolonius, <i>Dist.</i> .....    | 191  | Gonsalvus, <i>Dist.</i> .....      | 202  |



## A P P E N D I X.

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### HOMOPTERA.

Family JASSIDÆ. (Vol. IV, p. 157.)

Subfamily TETTIGONIELLINÆ. (Vol. IV, p. 200.)

Genus **TETTIGONIELLA**. (Vol. IV, p. 201.)

**TETTIGONIELLA FERRUGINEA**. (Vol. IV, p. 202.)

Add: *Hab.* South India; Kodaikanal (*T. V. Campbell*).

**TETTIGONIELLA INDISTINCTA**. (Vol. IV, p. 203.)

Add: *Hab.* Darna Hills (*F. H. Gravely*). W. Himalayas; Kumaon, Malwa Tal (*F. Kemp*).

3484. *Tettigoniella insignior*, sp. n.

Vertex of head ochraceous, with a transverse basal series of four dark spots; pronotum creamy-white, the anterior third ochraceous, with two central oblique black spots; scutellum ochraceous, with a small angulate black spot near each basal angle; face, clypeus, sternum and legs ochraceous, tibiæ and tarsi more or less fuscous; abdomen fuscous beneath, the posterior segmental margins and the anal appendage ochraceous; tegmina dark olivaceous, the apical areas paler, three small black spots, the first about one-fourth from base, the second beyond middle, the third on inner margin near apical area, the latter has also the veins and posterior margin black; wings black; vertex of head broader than long, somewhat tumid, face somewhat centrally flattened, laterally obsoletely carinate, longer than broad; clypeus strongly centrally carinate.

Length incl. tegm. 11 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Allied to *T. ferruginea*, Fabr., and *T. indistincta*, Walk. (vol. iv, pp. 202 & 203).

**TETTIGONIELLA ILLUSTRIS**. (Vol. IV, p. 204.)

Add: *Hab.* E. Himalayas; Darjiling Distr., Ghumti (*F. H. Gravely*).

3489. *Tettigoniella kharavela*, sp. n.

Head, pronotum and scutellum ochraceous, with two broad central longitudinal black fasciæ continued through vertex and pronotum and terminating in two large angulate spots which occupy the basal angles of the scutellum, lateral margins of pronotum narrowly black and two very small black discal spots on scutellum; face ochraceous, with two broad central black fasciæ connected with those on vertex; clypeus black; body beneath black, the segmental margins ochraceous; femora ochraceous, more or less basally suffused with black, tibiæ and tarsi black; tegmina testaceous, with two irregular longitudinal black fasciæ, the first crossing the clavus and terminating on its inner margin, the second subcostal, not reaching apical area which possesses a large subquadrate black spot, outer and posterior margins black; vertex of head broader than long; pronotum with a linear transverse impression about one-third from anterior margin; posterior tibiæ longly spinulose.

Length incl. tegm. 10 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Allied to *T. quadrilineata*, Sign. (vol. iv, p. 215).

*TETTIGONIELLA SANDARACATA.* (Vol. IV, p. 217.)

Add: *Hab.* E. Himalayas; Darjiling Distr., Kalimpong (*F. H. Gravelly*).

*TETTIGONIELLA CEYLONICA.* (Vol. IV, p. 219.)

In recording this species (*supra*) described by Melichar, I added "Unknown at present to the writer." I have since received two specimens from Mr. E. E. Green, taken at Peradeniya, Ceylon. This was also a locality recorded by Melichar.

*TETTIGONIELLA FUSCOVENOSA.* (Vol. IV, p. 220.)

Add: *Hab.* Ceylon; Namunukuli (*E. E. Green*).

This species was known to me only by Dr. Melichar's description when previously enumerating the species of *Tettigoniella*.

Genus **APPHIA**, nov.

Type, *A. burmanica*, Dist.

*Distribution.* Upper Burma.

Head as long as breadth between eyes, considerably longer than pronotum, anteriorly conically, subacutely produced; pronotum with the anterior margin convex, about as long as the scutellum; face very long, narrowing towards clypeus.

This genus is to be distinguished from *Tettigoniella* by the longly produced head and short pronotum, the first character allying it to the Ethiopian genus *Bolintila*, Dist., but that genus by having

the lateral margins of the vertex of the head in a line with the outer margins of the eyes is allied to *Kolla*, while the present genus has its vertical marginal characters like those of *Tettigoniella*.

3490. *Apphia burmanica*, sp. n.

Head, pronotum and scutellum testaceous; vertex of head with three small marginal spots, and a larger central subapical spot, black; pronotum with the posterior margin and a central longitudinal line black; body beneath and legs pale ochraceous; face with a central longitudinal line and the lateral margins (narrowly) black;



Fig. 1.—*Apphia burmanica*.

tegmina with the claval area dark ochraceous or pale testaceous, its inner and outer margins narrowly black, beyond claval area an ochraceous space outwardly margined with fuscous, remaining costal area and apex greyish, subhyaline; head as long as broad at base, its anterior margin subconvexly acute.

Length incl. tegm. 6 millim.

*Hab.* Upper Burma; Maymyo, 3500 ft. (*Bainbrigge Fletcher*).

Genus **OMARANUS**, nov.

Type, *O. typicus*, Dist.

*Distribution.* Calcutta.

Vertex of head about as long as breadth between eyes, the lateral margins not in a direct line with outer margins of eyes, moderately flat, ocelli between eyes a little farther apart from each other than from eyes; face elongate, attenuated towards anterior margin; pronotum centrally about as long as head, the lateral margins a little obliquely straight, the basal margin centrally subacutely inwardly sinuate; scutellum slightly shorter than head,

its apex shortly acute; tegmina about one-third longer than head, pronotum and scutellum together; the apical area with about five longitudinal cellular areas; posterior tibiæ longly spinulose.

3491. *Omaranus typicus*, sp. n.

Head, pronotum and scutellum ochraceous; vertex of head with three small black spots on anterior margin, the ocelli also black, and some small dark spots on basal margin; face pale ochraceous, its lateral margins very narrowly blackish, a large central black



Fig. 2.—*Omaranus typicus*.

spot at anterior margin, and an elongate black spot near anterior margins of eyes; clypeus with a narrow, lateral, marginal black line; body beneath and legs pale ochraceous; tegmina greyish white, the apical area dark fuscous-brown; structural characters as in generic diagnosis.

Length incl. tegm. 4 millim.

*Hab.* Calcutta.

Genus **KOLLA**. (Vol. IV, p. 223.)

3492. *Kolla maculifrons*, Schmidt, Stett. Ent. Zeit. 72. p. 295 (1911).

♂. "Head black, three brick-red spots on vertex, of which the middle one is triangular and placed before the ocelli, the lateral spots are at the eyes and extend as far as the base of the antennæ but nowhere reach the broad black hind margin of the vertex; there is an orange-red, elongate, medial longitudinal mark on the face, the sides of head and clypeus are, like the apical halves of the breast flaps and the legs, whitish; the anterior tibiæ, tarsi, and posterior tibiæ are darkly infused, breast and abdomen black, margins of the ventral segments yellow; posterior coxæ with a large brown spot; scutellum black, with a central brick-red spot; pronotum and tegmina brick-red, broad front and posterior margin

to pronotum and a medial longitudinal stripe which unites the two margins, black; tegmina with narrow front and hind margins of the apical area, a broader stripe on the claval suture, and another on the corium, which begins at the end of the basal third and extends over the apical area, black; wings suffused with smoky-black; basal third of antennæ yellowish, remainder blackish; ocelli dark, glassy.

"Var. *similis*. Distinguished by the narrower black markings of the pronotum and the tegmina; the two lateral spots on vertex as far as its hinder edge are elongate, the face dirty yellow and its sides greyish; a brown median stripe crosses the clypeus and extends to forehead and broadly encroaches on the lower face; whereas in typical forms the posterior coxæ bear a brown spot, the marking is absent in this example.

"Length incl. tegm. 6 millim.—var. 8 millim."

*Hab.* Sikkim (*Stettin Mus.*).

I know this species only from Dr. Schmidt's description.

#### KOLLA UNIMACULATA. (Vol. IV, p. 224.)

This appears to be a very variable species; the head, pronotum and scutellum are in ground-colour more frequently ochraceous than pale testaceous; pronotal basal black margin either only triangularly produced at middle, or reaching anterior margin as a central fascia. In one specimen from Kodaikanal, the black pronotal margin is not centrally produced and the vertex has a central black spot at base.

Add: *Hab.* Ceylon; Peradeniya (*J. C. F. Fryer*). South India; Kodaikanal, Yercaud, Nandidrug (*T. V. Campbell*), Shevaroy Hills (*Bainbrigge Fletcher*). N. India; Dehra Dun, Suragbagh—on Mango leaf (*Chait Ram*). Marudaimalin (*Pusa Coll.*). Bengal; Chapra (*Mackenzie*). Upper Burma; Maymyo (*Bainbrigge Fletcher*).

#### KOLLA INSIGNIS. (Vol. IV, p. 223.)

Add: *Hab.* E. Himalayas; Lebong, near Ghoom (*F. H. Gravely*).

Var. *a.* Pronotum without the waved transverse fascia.

*Hab.* Kurseong.

Var. *b.* The black coloration above replaced by pale bluish.

*Hab.* Kumaon.

#### 3493. *Kolla raja*, sp. n.

Head, pronotum and scutellum dark olivaceous; vertex of head with a small ochraceous central spot near anterior margin and a transverse series of three pale bluish spots near posterior margin; scutellum with the apical margins ochraceous; face ochraceous, anterior margin and a large spot occupying the posterior two-thirds



dark olivaceous, the lateral margins ochraceous; clypeus centrally dark olivaceous; sternum, legs and abdomen beneath mostly pale ochraceous; tegmina dark olivaceous, a large, pale, fasciate, longitudinal spot near costal margin pale bluish; vertex of head much shorter than breadth between eyes, anterior margin conically produced; pronotum moderately convex and declivous towards base of head; apex of scutellum subacute.

Length incl. tegm. 6 millim.

*Hab.* North Bengal; Siliguri, Darjiling (*Lynch*), Kurseong (*Ind. Mus.*). Himalyas; Simla (*N. Annandale*).

**3494. *Kolla pronotalis*, sp. n.**

Vertex of head ochraceous, two prominent black spots on anterior margin and a large discal spot, which is sometimes broken up into smaller spots, black; pronotum black, with two transverse ochraceous spots near anterior margin; scutellum ochraceous, with a small black spot near each basal angle; face ochraceous, a transverse oblique black spot near inner margin of each eye, and almost between them a central black spot, the lateral margins brownish; clypeus pale ochraceous, with a central longitudinal brownish or black fascia; body beneath and legs mostly ochraceous; tegmina black or blackish, the costal margin rather broadly very pale ochraceous, the apical area pale brownish; vertex of head considerably shorter than breadth between eyes, anteriorly conically produced; scutellum distinctly transversely impressed near middle; face elongate, the transverse marginal striations distinct; posterior tibiæ strongly spinulose.

Length incl. tegm. 5–6 millim.

*Hab.* Nilgiri Hills; Lovedale, 7200 feet (*T. V. Campbell*).

**3495. *Kolla ganesa*, sp. n.**

Vertex of head pale ochraceous, a small spot at apex, a transverse line before apex, from middle of which a central line extends to base and is margined on each side by a curved elongate spot, black; pronotum very pale ochraceous, with a central longitudinal fascia, narrowed anteriorly, and the lateral margins, black; scutellum ochraceous, with a black spot near each basal angle; face ochraceous, a central black spot near its anterior margin, and the apical margin black; body beneath and legs mostly pale ochraceous; tegmina blackish, the veins a little darker, the costal margin broadly greyish, the apical area more or less greyish with the veins black; vertex of head shorter than breadth between eyes, anteriorly conically, almost subacutely produced; scutellum finely transversely impressed near middle; face with the lateral margins strongly elevated and distinctly transversely striate.

Length incl. tegm.  $5\frac{1}{2}$ – $6\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

3496. *Kolla diaphana*, sp. n.

Head, pronotum and scutellum very pale ochraceous; vertex with two transverse linear spots between the antennæ, a small apical spot, a slender central longitudinal line, and a small spot near each ocellus, black; pronotum with an anterior central longitudinal spot, and a spot near each anterior angle, black; scutellum with a black spot near each basal angle; face with a central black spot at anterior margin, which is also narrowly black, the lateral striations brownish, clypeus with a black or blackish central longitudinal line; body beneath and legs pale ochraceous; tegmina greyish white, somewhat opaque, the veins darker, inner claval and apical margins very narrowly black; vertex of head only slightly shorter than pronotum; pronotum moderately declivous to basal area of head; scutellum faintly transversely depressed before apex.

Length incl. tegm. 6 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

3497. *Kolla tigrina*, sp. n.

Head, pronotum and scutellum ochraceous; vertex of head with three black spots, one at apex and two between eyes; pronotum with a small spot at middle of anterior margin, and a submarginal basal fascia (more or less centrally produced), black; scutellum with a black spot at each basal angle; face ochraceous, with the black spot at the apex of vertex continued at its base; body beneath and legs mostly ochraceous; tegmina ochraceous, with longitudinal black fasciæ, one in clavus, another on claval margin, the third—longest and broadest—almost subcostal, the margins also narrowly black; vertex of head short, much shorter than breadth between eyes; scutellum somewhat strongly depressed at base; face moderately centrally flattened.

Length incl. tegm. 5–6 millim.

*Hab.* South India; Kodaikanal and Nilgiri Hills (*T. V. Campbell*).

KOLLA MIMICA. (Vol. IV, p. 225.)

Add: *Hab.* Assam-Bhutan Frontier; Mangaldai (*S. W. Kemp*).  
Naini Tal Distr.; Jalaban.

KOLLA MUNGPUENSIS. (Vol. IV, p. 225.)

Add: *Hab.* E. Himalayas; Kurseong and Darjiling Distr. (*Lynch*).

KOLLA OPPONENS. (Vol. IV, p. 225.)

Add: *Hab.* Lebong, Phoobsering (*H. M. Lefroy*).

3498. *Kolla kodaiana*, sp. n.

Head, pronotum and scutellum creamy-white; vertex of head with the ocelli and eyes black, face with the lateral marginal areas pale brownish; scutellum with an angulate brownish-ochraceous

spot at each basal angle; body beneath and legs greyish white; tegmina dull creamy-white, the claval area, an elongate, fasciate spot on disk, and the inner apical margin pale brown, the extreme apical margin narrowly darker brown; apices of the tarsi black; vertex about as long as breadth between eyes, the apex conically narrowed, ocelli prominent and almost in a line with the anterior margins of eyes; pronotum gibbous on basal area; scutellum strongly transversely impressed near middle.

Length incl. tegm. 5 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Allied to *K. mungphuensis*, Dist.

**3499. *Kolla eliyana*, sp. n.**

Head pale ochraceous, vertex with a large central black spot almost extending from apex to base, the ocelli also black; face, body beneath and legs pale ochraceous; pronotum black, the lateral areas pale ochraceous; abdomen above black with a sub-basal ochraceous annulation, the base itself pale castaneous; scutellum black, its apical area pale ochraceous; tegmina pale brownish, semi-hyaline, the costal area very broadly pale bluish, the apical area pale brownish; vertex of head a little shorter than breadth between eyes, conically rounded anteriorly; face elongate, immaculate; scutellum strongly transversely impressed near middle.

Length incl. tegm. 5 millim.

*Hab.* Ceylon; Nuwara Eliya (*Bainbrigge Fletcher*).

**3500. *Kolla atronotata*, sp. n.**

Vertex of head greyish white, a large central spot on basal margin and a smaller spot at apex, black; pronotum ochraceous, a large, somewhat oblique black spot at each basal angle (these spots sometimes evanescent); scutellum greyish white, a small black spot in each basal angle; face pale ochraceous, a more or less elongate central spot at anterior margin, a minute spot near eyes and small apical spot, black or blackish; clypeus greyish white, with a black or blackish central line; tegmina greyish white, the claval and subclaval areas pale bluish, with an outer longitudinal black or blackish fascia which varies in length, breadth and intensity of coloration; body beneath and legs greyish white or pale ochraceous, apices of tarsi black; vertex of head a little shorter than pronotum, the apex conically or obtusely subacutely produced; pronotum somewhat convex on basal area, declivous towards base of head; face elongate, the lateral striations narrow and not prominent.

Length incl. tegm. 5-6 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

**KOLLA LINEATA.** (Vol. IV, p. 224.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).



Genus **EUACANTHUS**. (Vol. IV, p. 227.)3501. **Euacanthus militaris**, sp. n.

Vertex of head ochraceous, an angulated transverse black fascia between eyes; pronotum black, the basal margin broadly testaceous; scutellum black; face and clypeus ochraceous, a minute black spot at apex of face; abdomen beneath black, legs ochraceous; tegmina dark testaceous, a broad longitudinal black fascia in claval area, another similar fascia extending from about middle of tegmen to near apex and the costal margin to near apex, black; apical area brownish-ochraceous; vertex of head much broader than long, discally depressed, centrally and laterally longitudinally carinate; pronotum broader than long, moderately declivous towards anterior margin; face prominently centrally longitudinally carinate.

Length incl. tegm. 6 millim.

*Hab.* E. Himalayas; Darjiling (*C. Paiva*).

3502. **Euacanthus bellus**, sp. n.

Vertex of head ochraceous, two central spots at base and much of the anterior margin black; pronotum with the anterior half black, the posterior half ochraceous; scutellum black; face and body beneath black, legs mostly pale ochraceous; tegmina ochraceous, a broad longitudinal black fascia in claval area, a similar fascia which is bifid posteriorly commencing on disk of tegmen at about one-third from base and not reaching apex, apical area black, inwardly strongly cleft, costal margin narrowly black; vertex of head very much broader than long, moderately discally depressed, centrally and laterally longitudinally carinate; pronotum broader than long; face prominently centrally longitudinally carinate.

Length incl. tegm. 8 millim.

*Hab.* E. Himalayas; Darjiling.

**EUACANTHUS REPEXUS**. (Vol. IV, p. 228.)

Add: *Hab.* Himalayas; Mungphu (*Atkinson*), Darjiling (*Brunetti*), Kumaon, Bhowali (*A. D. Imms*), Simla Hills (*N. Annandale*).

Genus **MAINDA**. (Vol. IV, p. 229.)**MAINDA PRÆCULTA**. (Vol. IV, p. 230.)

Add: *Hab.* E. Himalayas; Kurseong.

Genus **PISACHOIDES**.

*Pisachoides*, *Dist.*, n. nom.

*Pisacha*, *Dist.*, Vol. IV, p. 230, nom. præocc.

**PISACHOIDES PRIMITIVA**.

*Pisacha primitiva* (Vol. IV, p. 231).

**PISACHOIDES PALLESCENS**.

*Pisacha pallescens* (Vol. IV, p. 231).

Genus **PRETA**. (Vol. IV, p. 234.)

Prof. Baker (Philipp. Journ. Sci. x, p. 189, 1915) is rather inconsistent in his remarks on this genus. He writes that it "has scarcely more than the value of a subgenus," but at p. 193 he proposes a new classification and a new subfamily (*Signoretiinæ*) to contain the genera *Signoretia* and *Preta*, for which he gives the *differential characters*; he also takes them out of the *Tettigoniellidæ* and places them in another family "*Stenocotidæ*." This I do not propose to follow.

**PRETA GRATIOSA**. (Vol. IV, p. 234.)

Add: *Hab.* Ceylon; Welligama, Maskeliya (*Bainbrigge Fletcher*).

Genus **BHARATA**, nov.

Type, *B. insignis*, *Dist.*

*Distribution*. Upper Burma.

Vertex of head much broader between eyes than long, only a little shorter than pronotum, rounded anteriorly, ridged near inner margins of eyes, depressed between ocelli; face longer than broad, centrally longitudinally foveate, its lateral margins strongly broadly ridged and transversely striate; pronotum nearly twice as broad as long, the lateral margins almost straight; scutellum large, at base only a little shorter than median length, its apex a little angularly produced, finely transversely depressed before apical area; tegmina much longer than abdomen, narrow; posterior tibiae strongly spinulose.

Allied to *Atkinsoniella* (vol. iv, p. 235) by the foveate face, in other characters resembling *Tettigoniella*.

**3503. Bharata insignis**, sp. n.

Head and pronotum ochraceous, head with a central elongate black spot, and pronotum with a central discal anteriorly angulate black spot; scutellum dull stramineous, with two large black spots

at anterior margin and four very small black spots before apex; face and clypeus ochraceous, the first with two small spots at anterior margin and two large medial spots on the central lateral ridges, black; apical area of clypeus black; body beneath black,



Fig. 3.—*Bharata insignis*.

the segmental margins ochraceous; legs ochraceous, apices of femora, tibiae and tarsi, black; tegmina pale bronzy-brown, a small spot on each margin of claval area and four spots on each costal margin, black; structural characters as in generic diagnosis.

Length incl. tegm. 12 millim.

*Hab.* Upper Burma (*Thomas*).

Genus **MILEEWA**. (Vol. IV, p. 238.)

**MILEEWA MARGHERITÆ**. (Vol. IV, p. 238.)

Add: *Hab.* Kurseong. Upper Burma; Maymyo (*Bainbrigge Fletcher—Pusa Coll.*).

Genus **UJNA**.\* (Vol. IV, p. 239.)

**UJNA GAGATINA**.

*Tettigonia gagatina*, *Melich. Hom. Faun. Ceylon*, p. 159 (1903).

*Tettigoniella?* *gagatina* (vol. iv, p. 221).

I had not seen this species when I enumerated it in 1907, but gave Dr. Melichar's description of it. Mr. E. E. Green has since forwarded three specimens collected at Nuwara Eliya, Ceylon.

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\* Prof. Baker (*Philipp. Journ. Sci.* ix, p. 416, 1914) erroneously ascribes this genus to Stål, which will lead to confusion, for if Stål had ever used the name generically, then it would have to be suppressed as employed by myself (*supra*).

Genus **FAENIUS**, nov.

Type, *F. lynchi*, Dist.

*Distribution.* British India.

Head about as long as breadth between eyes, ocelli almost in a line with anterior margins of eyes, lateral margins of vertex in a line with middle of eyes, apex obtusely narrowed; face somewhat elongate, broadest between eyes, narrowing to clypeus; pronotum about as long as vertex of head, its anterior margin moderately convex, its posterior margin truncate, the lateral margins oblique; scutellum a little broader at base than long, its apex lineately produced; tegmina elongate, their apices rounded inwardly and angularly developed outwardly; posterior tibiæ prominently spinulose.

The salient characters of this genus are found in the lineately produced apex of the scutellum, and the angularly produced apices of the tegmina.

Allied to the Ethiopian genus *Bolinlila*, Dist.

3504. **Faenius lynchi**, sp. n.

Head, pronotum and scutellum purplish brown, with a broad longitudinal ochraceous fascia which gradually widens from the apex of vertex of head (where it is narrowest) to scutellum (where it is broadest) and there occupies the whole area with the exception



Fig. 4.—*Faenius lynchi*.

of the basal angles; tegmina purplish brown, with a short transverse greyish fascia before apex; head beneath, sternum and legs pale ochraceous; abdomen beneath purplish brown; structural characters as in generic diagnosis.

Length incl. tegm.  $6\frac{1}{2}$  millm.

*Hab.* E. Himalayas; Darjiling (*Lynch*).

3505. *Faenius butleri*, sp. n.

Vertex of head brownish-ochraceous, the lateral and apical margins, two spots connected with each lateral margin, two spots near base, and an evanescent central line, greyish white; head beneath, sternum and legs creamy-white; pronotum reddish brown, anterior marginal area somewhat bluish grey, and with a pale central longitudinal line; scutellum greyish white, two elongate brownish spots at base; tegmina bluish black, the claval area tessellated with brownish, costal margin narrowly bluish for at least half its length, two greyish-white spots on apical area, and the truncate apical margins greyish white; apices of the intermediate and posterior tarsi black.

Length incl. tegm. 5 millin.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

I have named this species after Mr. E. A. Butler, a well-known authority on our British Rhynchota, to whom I are indebted for being able to examine the many South Indian captures of Dr. T. V. Campbell.

Genus **SHADDAI**, nov.

Type, *S. typicus*, Dist.

*Distribution.* Himalayas.

Vertex of head in length little more than half the breadth between eyes, anterior margin in a line with upper margins of eyes; ocelli indistinct but apparently between and near upper margins of eyes; face long and narrow, about three times as long as clypeus, rounded at anterior margin and very slightly narrowed towards clypeus, the lateral margins subparallel; pronotum about twice as broad at base as long, the anterior margin convexly rounded, the posterior margin slightly concave before scutellum, which is somewhat small and triangular; tegmina about four times as long as broad, the claval area long and apically acutely narrowed, the apical cells long and narrow; anterior and intermediate tibiae coarsely longly pilose, posterior tibiae spinulose, posterior tarsi with the basal joint very long.

I place this genus at the end of the *Tettigoniellinae*; its elongate face and short vertex are strongly marked characteristics.

3506. *Shaddai typicus*, sp. n.

Vertex of head and pronotum ochraceous, the first with a triangular central spot at apex and an angulated line between eyes, the pronotum with a central transverse fascia, black; scutellum apparently black, but injured by the insertion of an entomological pin; face piceous, its lateral margins and anterior area black, the latter containing two small ochraceous spots; body beneath mostly black, the legs ochraceous, the tibiae (excluding extreme bases)

black, posterior tarsi with the basal joint ochraceous; tegmina ochraceous, the apical areas obscurely subhyaline; outer claval



Fig. 5.—*Shaddai typicus*.

margins and about two-thirds of costal margins black; structural characters as in generic diagnosis.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* Darjiling.

Subfamily GYPONINÆ. (Vol. IV, p. 240.)

Genus **PENTHIMIA**. (Vol. IV, p. 241.)

**PENTHIMIA MELANOCEPHALA**. (Vol. IV, p. 241.)

Add: *Hab.* South India; Nandidrug (*T. V. Campbell*).

**PENTHIMIA COMPACTA**. (Vol. IV, p. 242.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*). Kumaon, Almora (*C. Paiva*). Darjiling Distr., and Calcutta (*F. H. Gravely*).

3507. **Penthimia nilgiriensis**, sp. n.

Vertex of head, pronotum and scutellum dark ochraceous or pale testaceous; body beneath and legs more or less ochraceous, apices of posterior femora sometimes with black suffusions; tegmina very dark ochraceous; scutellum a little broader than long, transversely impressed near middle; pronotum declivous towards vertex of head, finely but obscurely wrinkled, basal margin almost straight; vertex of head considerably shorter than



scutellum, its anterior margin conically, almost subacutely produced; tegmina distinctly finely granulose and punctate; bases of spinules to posterior tibiae sometimes black, the extreme apices of posterior tibiae black.

Length incl. tegm. 6 millim.

*Hab.* Nilgiri Hills; Lovedale (*T. V. Campbell*).

3508. *Penthimia montana*, sp. n.

Vertex of head and scutellum ochraceous, pronotum a little paler and more pale greenish-ochraceous; vertex with a black spot at apex, sometimes nearly the whole apical margin black, ocelli black; pronotum with two darker spots near anterior margin; scutellum with a black spot near each basal angle, two small spots and a transverse line on disk black, (these dark markings sometimes fused); face (excluding anterior margin) black; body beneath and legs black; apices of femora, anterior and intermediate tibiae and tarsi pale ochraceous, these tibiae longitudinally streaked with black, bases of posterior tibiae and tarsi pale ochraceous; tegmina testaceous, thickly maculately mottled, two small black spots at apex of claval area, the apical area paler and uniformly coloured, its inner margin with some black suffusions; scutellum a little longer than vertex of head, transversely impressed near middle; vertex of head with the anterior margin subconically produced; pronotum obscurely transversely wrinkled.

Length incl. tegm.  $5\frac{1}{2}$  millim.

*Hab.* Nilgiri Hills; Lovedale (*T. V. Campbell*).

3509. *Penthimia badia*, sp. n.

Vertex of head, pronotum, scutellum and tegmina ochraceous, with obscure darker suffusions or mottlings; some minute spots on lateral margins of scutellum, and a spot at apex of claval area, black; apical area of tegmina with black suffusions; body beneath and legs pale ochraceous. A broad, robust species, the scutellum distinctly longer than the vertex of head, and transversely, roundly impressed near its middle; pronotum irregularly transversely wrinkled, declivous towards vertex which is conically rounded in front; posterior tibiae longly but not robustly spinulose.

Length incl. tegm. 6 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Allied to *P. castanea*, Walk.

3510. *Penthimia vittatifrons*, sp. n.

Body above and beneath pale castaneous; legs paler and more pale testaceous; anterior margin of face between eyes ochraceous; apical area of tegmina more or less distinctly spotted with white; vertex of head in length equal to about half the breadth between

eyes, anteriorly conically rounded; scutellum longer than vertex, its basal margin longer than lateral margins, transversely incised near middle; pronotum anteriorly declivous in a line with head.

Length incl. tegm. 6–6½ millim.

*Hab.* Ceylon; Maha Illupalama (*J. C. F. Fryer*), Peradeniya (*E. E. Green*).

**3511. *Penthimia majuscula*, sp. n.**

Head, pronotum and scutellum ochraceous; face (imperfectly seen in unique carded type) black, excluding narrow anterior ochraceous margin; sternum black, with some lateral paler spots; abdomen beneath very pale ochraceous, with a central, segmental series of transverse black spots; femora black, their apices narrowly ochraceous, anterior and intermediate tibiæ and tarsi ochraceous, bases of tibiæ black or blackish, posterior tibiæ and tarsi black, apices of the tibiæ and bases of the tarsi ochraceous; tegmina dark chocolate-brown, costal margin on apical third spotted with ochraceous; scutellum transverse, broader than long, longer than vertex, its apex subacute, its lateral margins oblique, a slightly curved transverse impression near middle; pronotum a little longer than scutellum, roundly deflected towards head, its basal margin moderately sinuately excavate; vertex of head anteriorly convexly rounded; posterior tibiæ strongly spinulose.

Length incl. tegm. 6 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

**3512. *Penthimia variabilis*, sp. n.**

♂. Body above and tegmina pale ochraceous or greyish, thickly and irregularly mottled and suffused with black; vertex of head with a large apical spot, and a small spot near inner margin of



Fig. 6.—*Penthimia variabilis*.

each eye, pale ochraceous; pronotum with the anterior area pale ochraceous, with some black spots near anterior margin; scutellum



dull brownish-ochraceous, with a dark spot near each basal angle and two small dark spots on apical area; face pale ochraceous, the basal half mottled with black; legs blackish, apices of the femora, basal halves of intermediate tibiae, the whole of the anterior tibiae, anterior and intermediate tarsi and base of posterior tarsi, ochraceous; tegmina pale fuscous, mottled with black and greyish white.

♀. Larger and paler than ♂; vertex of head and scutellum almost entirely ochraceous; tegmina duller ochraceous, the claval area with darker suffusions; face almost entirely ochraceous, vertex only a little longer than half the breadth between eyes; pronotum moderately convex, its anterior area declivous; scutellum transversely impressed near middle; spinules to the posterior tibiae strong and ochraceous in hue.

Length incl. tegm., ♂  $4\frac{1}{2}$ –5; ♀  $5\frac{1}{2}$ –6 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Dr. Campbell has sent home these two forms as the sexes of the same species and is doubtless correct in so doing.

### 3513. *Penthimia funebris*, sp. n.

Vertex of head, pronotum and scutellum black; anterior half of each lateral margin of scutellum pale brownish; body beneath and legs black, apices of femora, the anterior and intermediate tarsi, and the spinules to posterior tibiae, pale brownish; tegmina brownish-ochraceous, more palely maculately mottled and with some obscure suffusions of black, two small spots near middle of each claval area, a small spot near middle of costal margin, and two small subcostal spots near base of apical area, greyish white; scutellum only a little longer than vertex, roundly transversely impressed near middle; pronotum finely transversely wrinkled; vertex anteriorly conically rounded.

Length incl. tegm.  $5\frac{1}{2}$  millim.

*Hab.* Nilgiri Hills; Lovedale (*T. V. Campbell*).

### 3514. *Penthimia thoracica*, sp. n.

Vertex of head and scutellum pale testaceous; pronotum greyish white; face ochraceous; clypeus, body beneath, and legs black; apices of femora, anterior and intermediate tibiae and tarsi, bases of posterior tarsi and spinules to posterior tibiae, ochraceous; tegmina pale testaceous, two small black spots at apices of claval areas; pronotum finely transversely striate; scutellum foveately impressed, a little longer than vertex which is anteriorly convexly rounded.

*Var.* Tegmina with four small black spots at apices of claval areas, two spots on middle of tegmen and two others before apical area, black.

Length incl. tegm. 5 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

3515. *Penthimia flavocapitata*, sp. n.

Vertex of head ochraceous, eyes black; pronotum and scutellum piceous, the latter with an ochraceous spot near each basal angle; body beneath and legs more or less piceous; tegmina with a little more than claval area piceous with some pale maculate markings, posterior two-thirds of costal area merging into the whole of apical area greyish with numerous piceous maculate suffusions; vertex of head broad, its anterior margin conically rounded, scarcely longer than half the breadth between eyes; pronotum convex, declivous towards head; scutellum a little broader than long.

Length incl. tegm. 4 millim.

*Hab.* South India; Nilgiri Hills (*T. V. Campbell*).

3516. *Penthimia mudonensis*, *Dist. A. M. N. H.* (8) x, p. 444 (1912).

Body above castaneous; vertex of head with the anterior and basal margins, a central longitudinal line, and the eyes black; scutellum with three ochraceous spots, one near middle of each lateral margin and the third apical; margins of clavus narrowly black; more than apical third of tegmen dull ochraceous, tessellated with black cellular rings varying in size, prominent among which are spots in frontal margin of the apical area continued up



Fig. 7.—*Penthimia mudonensis*.

the lateral margin of tegmen; at extreme apex the colour is greyish, semiopaque, with a blackish spot in the apical cells; body beneath castaneous; face, cheeks, clypeus, disk of sternum, suffusions to femora, and transverse central basal spots to abdomen beneath, black; vertex of head convexly rounded in front, in length nearly half the breadth between eyes; pronotum convex, wrinkled transversely; posterior tibiæ longly strongly pilose.

Length  $5\frac{1}{2}$  millim.

*Hab.* Tenasserim; Mudon-Amherst Distr. (*Annandale, Ind. Mus.*).

A distinct species by the three pale spots to the scutellum, the large tessellate apical area to the tegmina, the short vertex, &c.

3517. *Penthimia nitida*, Dist. A. M. N. H. (8) x, p. 444 (1912).

Head pronotum, scutellum, and tegmina (excluding apical area) shining black, apical area of tegmen greyish subhyaline, outwardly and inwardly ochraceous, more or less extending upward to the opaque black area; body beneath black, the legs ochraceous, anterior femora basally suffused with black; head rounded in front, the anterior margin somewhat acutely reflexed; pronotum moderately convex, slightly wrinkled, and sparingly coarsely punctate; scutellum opaquely black, thickly finely punctate; tegmina (excluding apical area) coarsely punctate; posterior legs suffused with black, posterior tibiae strongly spinose, the tarsi ochraceous.

Length 4 millim.

*Hab.* Burma; Moulmein.

A species to be recognized by the strongly punctured upper surface; it may be placed near *P. erebus*, Dist.

PENTHIMIA SCAPULARIS. (Vol. IV, p. 244.)

PENTHIMIA MACULOSA. (Vol. IV, p. 244.)

Since I described these species I have examined a large number of specimens derived from various localities and find that the specific distinctions cannot be maintained. The testaceous spot near the posterior angles of the pronotum, as described in *scapularis*, is frequently absent, as are also, sometimes, the maculate markings to the scutellum. The two descriptions afford a guide to the variations of the species, which must take the first name used viz. *scapularis*.

Add: *Hab.* South India; Coimbatore. Sikkim; Lebong (*H. M. Lefroy*). Burma (*R. D. Shroff*).

3518. *Penthimia fraterna*, sp. n.

Head, pronotum and scutellum black, the latter with a small obscure spot at each basal angle, and a similar spot near middle of each lateral margin; face black; legs black, apices of femora and anterior and intermediate tibiae and tarsi ochraceous; tegmina black, thickly speckled with brownish-ochraceous, a pale spot near middle of claval area, a similar spot near middle of costal margin, and a cluster of greyish and ochraceous spots on apical area.

Allied to *P. scapularis*, Dist., but a more elongate species; maculate markings different.

Length incl. tegm. 6 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

3519. *Penthimia quadrinotata*, sp. n.

Head, pronotum and scutellum black; pronotum with an obscure, central, longitudinal brownish-ochraceous fascia (in some specimens this is more or less obsolete); face black, its lateral and posterior margins ochraceous; body beneath and legs black or

blackish; tegmina black, finely granulose, a pale greyish spot near middle of each claval area and a similarly coloured spot at lateral margins of apical area, which is also paler and more ochraceous in hue; vertex of head scarcely longer than half the width between eyes; pronotum gradually, roundly declivous from near base; scutellum with two small foveate impressions near middle; tegmina distinctly finely granulose.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

**3520. *Penthimia noctua*, sp. n.**

Body and tegmina black; apical margins of the tegmina broadly ochraceous; legs ochraceous, longitudinal markings to femora and the posterior tibiæ black; a small dull ochraceous spot at the apex of each claval area. An elongate species; vertex of head shorter than scutellum, somewhat strongly declivous in a line with the deflected anterior area of the pronotum, its anterior margin subconically rounded; tegmina somewhat rugosely wrinkled, subtruncately rounded at apices, a little narrowed at base.

Length incl. tegm. 5 millim.

*Hab.* Darjiling.

*PENTHIMIA EREBUS.* (Vol. IV, p. 245.)

Add: *Hab.* South India; Mysore State and Nilgiri Hills (*T. V. Campbell*).

**3521. *Penthimia attenuata*, sp. n.**

Body, legs and tegmina black; more than apical third of tegmina darker and more opaque.



Fig. 8.—*Penthimia attenuata*.

The principal character of this species is the subangularly, attenuated apical tegminal areas; vertex of head longer than half the width between eyes; pronotum strongly, roundly, anteriorly

declivous; scutellum transversely impressed near middle, behind which it is transversely striate; posterior tibiæ strongly spinulose, the spinules dark ochraceous.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* South India; Nandidrug (*T. V. Campbell*).

Genus **TAMBILA**. (Vol. IV, p. 247.)

3522. *Tambila opulenta*, sp. n.

Vertex of head, pronotum and scutellum reddish-ochraceous; vertex with two curved black fasciæ; pronotum with two black fasciæ commencing behind eyes, centrally connected and each then angularly extended posteriorly on disk; body beneath black; margins of the sternal and abdominal segments sanguineous; legs mostly black, anterior legs, intermediate tibiæ and tarsi, and extreme apices of the posterior femora sanguineous; tegmina black, minutely and obscurely spotted with testaceous, the apical area paler and minutely spotted with greyish; vertex of head about half as long as breadth between eyes, its apex rounded; scutellum about as long as vertex, its basal margin only slightly longer than lateral margins, transversely roundly impressed near middle, before which it is centrally, longitudinally carinate; posterior tibiæ somewhat longly spinulose.

Length incl. tegm. 5 millim.

*Hab.* Ceylon; Peradeniya (*E. E. Green*).

Allied to *T. greeni*, Dist. "Bred from *Persea gratissima*" (*Green*).

3523. *Tambila fletcheri*, sp. n.

Vertex of head, pronotum and scutellum ochraceous; body beneath and legs ochraceous; a broad transverse fascia at base of head beneath, and under surface of legs (more or less) dark castaneous; tegmina dark castaneous, lateral margins of the apical areas paler and with some small greyish-white spots; vertex of head broad, about half as long as breadth between eyes, the apex broadly rounded; lateral margins of the pronotum nearly obliquely straight; scutellum about as long as vertex, its basal margin only slightly longer than lateral margins, transversely impressed near middle; tegmina moderately attenuated on apical area.

Length incl. tegm. 6 millim.

*Hab.* Ceylon; Nuwara Eliya (*Bainbrigge Fletcher*).

3524. *Tambila gravelyi*, sp. n.

Body above and tegmina testaceous brown, more or less speckled with black; scutellum pale, bright ochraceous, extreme basal angle and a few minute spots on basal margin testaceous; apical areas of the tegmina paler and spotted with greyish white; body beneath



and legs testaceous; vertex of head rounded anteriorly, about as long as scutellum, which is transversely incised near middle; apices of the posterior tarsi black; tegmina subrugosely wrinkled.



Fig. 9.—*Tambila gravelyi*.

Length incl. tegm. 6 millim.

*Hab.* Bombay Pres., Satara Distr.; Yenna Valley, Medha (F. H. Gravely).

3525. *Tambila conspersa*, sp. n.

Vertex of head, pronotum, scutellum and tegmina brownish-ochraceous with minute paler mottlings and some larger darker suffusions; scutellum with a small spot near each basal angle and the apex stramineous; face brownish-ochraceous, much suffused with black; body beneath and legs pale ochraceous; femora distinctly longitudinally streaked with black beneath; vertex of head about half as long as breadth between eyes, the apex somewhat conically rounded, about as long as scutellum, the basal margin of which is only slightly longer than the lateral margins; the apical marginal area of the tegmina is paler and contains a few small white spots.

Length incl. tegm.  $5\frac{1}{2}$  millim.

*Hab.* Ceylon; Namunukula (Bainbrigge Fletcher).

Genus **MALICHUS**, nov.

Type, *M. capitatus*, Dist.

*Distribution.* Ceylon.

Vertex of head large and spatulate, only a little shorter than pronotum and scutellum combined, its anterior margin broadly subacute, its posterior margin a little concave between the eyes; ocelli placed on disk a little before middle, nearer to lateral margins than to each other; pronotum about twice as broad as

long, the lateral margins oblique and nearly straight, the posterior margin also nearly straight; scutellum small, triangular, its basal margin considerably longer than the lateral margins; tegmina broad, distinctly widened near middle.

Allied to *Tambila*, from which it differs by the large cephalic vertex, shorter pronotum, broader scutellum, &c.

3526. *Malichus capitatus*, sp. n.

Vertex of head pale ochraceous with some pale testaceous maculate markings, especially near the anterior margin; pronotum and tegmina dark brownish, the anterior area of the pronotum somewhat pale ochraceous, lateral apical areas of the tegmina tinged with greyish white; scutellum dull ochraceous, mottled with



Fig. 10.—*Malichus capitatus*.

brownish; face reddish-ochraceous, broadly apically ochraceous, and submarginally broadly black, the clypeus also black; body beneath and legs more or less ochraceous, bases of the femora black; structural characters as in generic diagnosis.

Length incl. tegm. 7 millim.

*Hab.* Ceylon; Peradeniya (*Bainbrigge Fletcher—Pusa Coll.*).

Genus **NEODARTUS**. (Vol. IV, p. 246.)

**NEODARTUS ACOCEPHALOIDES**. (Vol. IV, p. 246.)

Add: *Hab.* Bengal; Calcutta, Katihar.

**NEODARTUS SCUTELLATUS**. (Vol. IV, p. 246.)

Add: *Hab.* South India; Coimbatore Chikkaballapura (*T. V. Campbell*).

Genus **VULTURNUS**.

*Vulturnus*, Kirk. *Rep. Exp. Stat. Haw. Plant. Assoc.*, Bull. i, p. 463 (1906); *id. tom. cit.* Bull. iii, p. 81 (1907).

Type, *V. vulturnus*, Kirk., from Queensland.

*Distribution*. Oriental and Australasian Regions.

Kirkaldy only comparatively separated this genus from his other Australian genus *Thaumatoscopus*. He wrote "*Neodartus* I do not know," but it is Melichar's genus to which it is more closely allied and from which it may be distinguished by the smaller scutellum and by the flatter and more foliaceous head beneath.

5527. *Vulturnus ornatus*, *Dist. A. M. N. H.* (8) x, p. 445 (1912).

Vertex pale ochraceous finely speckled with brownish; pronotum very pale castaneous, thickly blackly reticulate, the posterior margin and a central transverse fascia greyish white; scutellum ochraceous, with black reticulations, which are more dense near basal margin and less so on lateral areas; body beneath (including face) and legs black; basal margin of head beneath between eyes, anterior and intermediate tibiae and tarsi, minute spots to posterior

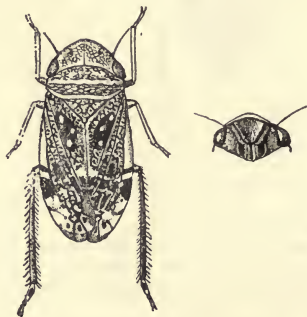


Fig. 11.—*Vulturnus ornatus*.

tibiae, bases and apices of posterior tarsi, and a lateral marginal spot to metasternum, ochraceous; tegmina ochraceous, finely blackly reticulate, clavus with a discal black patch enclosing about four small white spots, its apex also whitish; a large central, longitudinal, costal white spot, which contains two small black spots and is followed by a larger black spot, and a cluster of subapical white spots; vertex a little broader than long, with an indistinct central longitudinal carination.

Length incl. tegm. 4 millim.

*Hab.* Ceylon; Peradeniya (*Green*).



3528. *Vulturnus speciosus*, *Dist. A. M. N. H.* (8) x, p. 445 (1912).

Vertex ochraceous; a black submarginal apical line not reaching eyes, and with three testaceous discal spots, the central one transverse, the other two shorter and oblique; eyes black; pronotum ochraceous or very pale castaneous, thickly blackly reticulate, the posterior margin and a central transverse fascia greyish white; scutellum piceous, with four greyish-white spots, two before apex and two near basal margin; body beneath (including face) and legs black; basal margin of head beneath containing a few minute dark spots and anterior and intermediate tibiae and tarsi ochraceous; tegmina ochraceous, finely, thickly, blackly reticulate, a small black patch in clavus containing about three white spots, some white spots on claval suture, a small white spot on disk of tegmen, three whitish spots on costal margin, and a small cluster of subapical white spots; vertex slightly longer and a little more narrowed anteriorly than in *V. ornatus*, with a central dark incised line extending from base about halfway to apex.

Length incl. tegm.  $3\frac{1}{2}$  millim.

*Hab.* Ceylon; Peradeniya (*Green*).

Genus **VANGAMA**. (Vol. IV, p. 260.)

VANGAMA STENEOSAURA. (Vol. IV, p. 260.)

Add: *Hab.* N. India; Dehra Dun (*A. D. Imms*—on grass). E. Himalayas; Darjiling Distr., Ghumti (*F. H. Gravely*).

Genus **TRAIGUMA**. (Vol. IV, p. 261.)

TRAIGUMA NASUTA. (Vol. IV, p. 261, fig. 168.)

Dr. T. V. Campbell has forwarded a long series of specimens collected on the Nilgiri Hills which show a great variety in coloration beyond that of the seven typical examples received from the same region as originally described. Some of these newly acquired specimens conform to the pale coloration of the type; others are very much darker in hue, with the whole upper surface more or less suffused with piceous or even black; even more variable is the colour of the legs in these later specimens, some conform to the typical specimens, others have the intermediate and posterior femora black with their apices ochraceous, and with the apices of the tibiae and tarsi also black.

3529. *Traiguma verticalis*, sp. n.

Head, pronotum, scutellum, body beneath and legs very pale tawny brown, abdomen above bright ochraceous, with its lateral marginal area pale tawny brown; tegmina pale tawny brown with darker mottlings, the apical margin distinctly darker and more piceous; posterior femora with the apices black.

*Var.* Body and legs piceous or dark piceous; intermediate and posterior tarsi greyish, with the apices of the joints pale piceous.

Length incl. tegm. 9–10 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Allied to *T. nasuta*, Dist., but differing by the shorter and anteriorly acuminate, and not spatulately produced vertex of head. In coloration it is as variable as is *T. nasuta*.

Genus **GURAWA**. (Vol. IV, p. 262.)

**GURAWA VEXILLUM**. (Vol. IV, p. 263.)

Add: *Hab.* South India; Kodaikanal (*T. V. Campbell*).

Genus **AHENOBARBUS**, nov.

Type, *A. assamensis*, Dist.

*Distribution.* Assam. North China.

Vertex of head longly produced in front of eyes, above centrally compressed and roughly sinuate, laterally foveately compressed, its apex obliquely truncate, above centrally and laterally carinate, the carinations very distinct in the region of the eyes; pronotum strongly centrally tricarinate, its lateral margins obliquely concave; scutellum somewhat small, somewhat faintly centrally and laterally tricarinate; tegmina with their lateral margins straight and parallel, their apices rounded; anterior and intermediate tibiæ finely, posterior tibiæ strongly spinulose; anterior tibiæ moderately dilated.

The *Prolepta? tuberculata*, Walk. (List Hom. Suppl. p. 315), from North China, belongs to this genus.

3530. **Ahenobarbus assamensis**, sp. n.

Body above and beneath and legs more or less tawny brown; upper surface of produced vertex, pronotum and scutellum



Fig. 12.—*Ahenobarbus assamensis*.

distinctly darker in hue; a rounded black spot in each basal angle of scutellum; tegmina sparsely darkly rugose; apices of femora

and tibiæ black, the tarsi pale, annulated with black; structural characters as in generic diagnosis.

Length incl. tegm. 18 millim.

*Hab.* Assam.

Subfamily JASSINÆ. (Vol. IV, p. 265.)

Genus **CHUDANIA**. (Vol. IV, p. 268.)

**CHUDANIA DELECTA**. (Vol. IV, p. 268.)

Add: *Hab.* E. Himalayas; Darjiling Distr., Ghumti (*F. H. Gravelly*).

Genus **MUKARIA**. (Vol. IV, p. 269.)

**MUKARIA SPLENDIDA**. (Vol. IV, p. 270.)

Add: *Hab.* S. India; Chikkaballapura (*T. F. Campbell*).

Genus **MOHUNIA**. (Vol. IV, p. 272.)

3531. **Mohunia modesta**, sp. n.

Very pale stramineous; two pale longitudinal, central, sanguineous fasciæ continued through vertex, pronotum and scutellum; eyes black; tegmina with a pale longitudinal sanguineous fascia extending through clavus, and with two small brown spots on apical area; body beneath and legs pale stramineous or ochraceous; vertex of head more narrowly subconically produced than in the typical species, *M. splendens*, Dist. (vol. iv, p. 272, fig. 175); apex of abdomen with long, slender bristles or hairs.

Length incl. tegm. 4 millim.

*Hab.* South Burma.

Genus **HECALUS**. (Vol. IV, p. 273.)

**HECALUS LEFROYI**. (Vol. IV, p. 275.)

Add: *Hab.* N. Bengal; Saran, Siripur (*Ind. Mus.*).

3532. **Hecalus facialis**, sp. n.

Pale ochraceous or virescent; lateral margins of face distinctly and rather broadly dull pale testaceous; abdominal appendage testaceous; vertex of head shorter than pronotum and scutellum together, the apical margin broadly rounded; pronotum anteriorly, obliquely broadly carinate; scutellum transversely impressed before apex; tegmina with the venation almost concolorous but distinct; face moderately striate on its lateral areas; posterior tibiæ distinctly, thickly spinulose.

Length incl. tegm. 7–8 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*). United Provinces; Cawnpore Distr., Anwarganj. Bengal; Khargpur (*R. Hodgart*).

Allied to *H. lefroyi*, Dist., but with the vertex of head shorter and less narrowed anteriorly, the distinct markings to face, which is narrower and more oblong, etc.

3533. *Hecalus capitatus*, sp. n.

Ochraceous; vertex sprinkled with fine brownish speckles, two central, linear, longitudinal castaneous fasciæ, and three small black spots on basal margin; face ochraceous, the frontal half before eyes broadly marginally pale castaneous; pronotum finely speckled with brownish; tegmina with larger brownish speckles, the extreme costal margin pale testaceous; scutellum with two rounded black spots on basal margin and with some more linear blackish spots on lateral margins and at apex: vertex of head shorter than pronotum and scutellum together, moderately, roundly narrowed at apex; femora darkly spotted near apices, posterior tibiæ darkly spotted at bases of spinules, which are long and slender.

Length incl. tegm.  $10\frac{1}{2}$  millim.

*Hab.* North Bengal.

3534. *Hecalus godavariensis*, sp. n.

Very pale virescent, the scutellum and tegmina a little more pale ochraceous; vertex of head shorter than pronotum and scutellum together, with a few very small darker spots near basal margin; face broadly elongate, convex, with oblique darker striations on lateral areas; pronotum slightly rugose and excavate; scutellum moderately, broadly, centrally depressed, the lateral margins of this depression carinate; tegmina with the venation almost concolorous but distinct; posterior tibiæ thickly, longly spinulose.

Length incl. tegm. 8 millim.

*Hab.* Madras Prov.; Godavari Distr., Samalkot.

Genus **PARABOLOCRATUS.**

*Parabolocratus* Fieber, *Verh. z.-b. Ges. Wien*, p. 502, t. vii, fig. 13 (1866); *id.* *Rev. Mag. Zool.* (3) ii, p. 404, t. xii (1875); *Sign. Ann. Soc. Ent. Fr.* 1879, pp. 51 & 275; *Oshan. Verz. Pal. Hem.* Bd. ii, Hom. p. 86 (1906); *Dist. Ins. Transvaal*, p. 239, Tab. xxiii, fig. 7, a (1910).

*Thomsoniella*, *Sign.* (vol. iv, p. 277).

Type, *P. glaucescens*, Fieb., a Palearctic species.

*Distribution.* Palæarctic, Nearctic, Oriental, Ethiopian, and Australian regions.

There seems no doubt that Fieber's genus must take precedence over Signoret's *Thomsoniella*.

**PARABOLOCRATUS PORRECTUS.**

*Thomsoniella porrecta* (vol. iv, p. 278).

Add: *Hab.* Burma; Rangoon.

**PARABOLOCRATUS RUSTICUS, n. nom.**

*Thomsoniella viridis* (vol. iv, p. 280), nom. preocc.

Add: *Hab.* S. India; Chikkaballapura (*T. V. Campbell*); Nilgiri Hills, Lovedale (*T. V. Campbell*).

The name *viridis* having been used for a Nearctic species (*P. viridis*, Uhler) it becomes necessary to give a new specific name to the Oriental species.

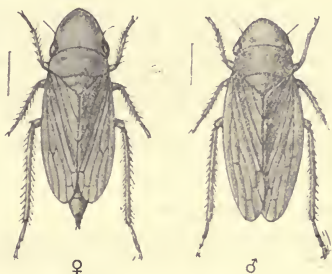


Fig. 13.—*Parabolocratus rusticus*.

The sexes vary in the size of the head (as here figured) and also as in typical sexual examples of *P. viridis*, Uhler, kindly sent to me by Mr. Van Duzee.

**3535. *Parabolocratus lutescens*, sp. n.**

Pale luteous; more or less marked with dark suffusions, especially on the pronotum and tegmina; vertex of head distinctly, narrowly margined with black; body beneath and legs luteous, femora usually with dark suffusions, posterior tibiæ distinctly inwardly margined with black; vertex of head anteriorly subangularly rounded; pronotum finely, transversely striate; scutellum convexly, transversely impressed before apex; posterior tibiæ somewhat longly spinulose.

Length incl. tegm. 6 millim.

*Hab.* Nilgiri Hills (*T. V. Campbell*).

**PARABOLOCRATUS ARCUATUS.**

*Thomsoniella arcuata* (vol. iv, p. 280).

Add: *Hab.* S. India; Nandidrug (*T. V. Campbell*).

**PARABOLOCRATUS ALBOMACULATUS.**

*Thomsoniella albomaculata* (vol. iv, p. 280).

Add: *Hab.* S. India; Chikkaballapura (*T. V. Campbell*).

**Genus BUMIZANA, nov.**

Type, *B. elongata*, Dist.

*Distribution.* South India.

Vertex of head more than twice as long as pronotum and scutellum together, gradually narrowing from base to apex, the lateral margins obliquely straight, very strongly, centrally, longitudinally carinate, the lateral areas obliquely depressed; eyes at base somewhat small; face moderately flattened, more or less centrally longitudinally carinate, the carination less distinct from before the eyes to base; pronotum shorter than broad at base, moderately convex, centrally and also laterally marginally carinate; scutellum considerably shorter than pronotum, centrally longitudinally carinate; tegmina more than four times as long as broad, narrowing to apices, which are subacute, the venation dense and prominent; legs short and slender; posterior tibiæ finely spinulose.

Allied to *Cephalelus*, Perch., found in the Ethiopian and Australian regions.

**3536. *Bumizana elongata*, sp. n.**

Head, pronotum and scutellum ochraceous, the tegmina distinctly darker and more fuscous-brown, but sometimes also ochraceous;



Fig. 14.—*Bumizana elongata*.

vertex of head with a dark fuscous spot on each side near middle and sometimes with two short central dark lines near



apex; eyes dark castaneous or fuscous; pronotum with two longitudinal darker fasciæ on each side of the central carination, which is ochraceous; scutellum with a pale central carination and a somewhat raised spot at each basal angle; body beneath and legs pale ochraceous, the face with the apical area continued in oblique fasciæ on each side to base, piceous or black, and a dark fuscous spot on each side near middle; tegmina with the veins prominent and usually paler than the ground coloration; vertex of head, pronotum and scutellum finely punctate; other structural characters as in generic diagnosis.

Length incl. tegm.  $8\frac{1}{2}$ –9 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Genus **NIRVANA**. (Vol. IV, p. 231.)

**NIRVANA GREENI**. (Vol. IV, p. 283.)

Add: *Hab.* South India; Nandidrug, Chikkaballapura (*T. V. Campbell*).

**NIRVANA LONGITUDINALIS**. (Vol. IV, p. 283.)

Add: *Hab.* Burma; Amherst Distr., Kawkaireik (*F. H. Gravely*).

**NIRVANA SUTURALIS**. (Vol. IV, p. 284.)

Add: *Hab.* South India; Kodaikanal, and Nilgiri Hills, Lovedale (*T. V. Campbell*). E. Himalayas; Darjiling (*Lynch*).

**NIRVANA PALLIDA**. (Vol. IV, p. 284.)

Add: *Hab.* South India; Kodaikanal, Chikkaballapura (*T. V. Campbell*).

3537. **Nirvana insignis**, sp. n.

Pale ochraceous, disk of vertex and the tegmina paler in hue; tegmina with four transversely oblique black lines on apical third of costal area and a discal black spot just before apex; body beneath and legs a little darker ochraceous than above; vertex of head about as long as pronotum and scutellum together, the lateral margins ridged, the apex subacute; face centrally longitudinally ridged, the lateral areas finely obliquely striate.

Length incl. tegm. 5 millim.

*Hab.* Travancore.

This species is more closely allied to *N. koreana*, Matsum., from Korea (Trans. Sapp. N. H. Soc. v. p. 171, Taf. 1, fig. 12, 1915).

Genus **OPHIUCHUS**, nov.

Type, *O. princeps*, Dist.

*Distribution.* British India; Madras Province.

Vertex of head spatulate, about as long as pronotum and scutellum together, the lateral margins straight for a short

distance in front of eyes and then obliquely narrowed to apex, which is subacute; face somewhat flattened, projecting considerably in front of eyes, narrowed towards clypeus; pronotum transverse, moderately convex, anterior and posterior margins straight, lateral margins a little oblique; scutellum broader at base than long, subtriangular.

Allied to *Nirvana*, Kirk. (vol. iv, p. 281), from which it principally differs by the structure of the vertex of the head.

3538. *Ophiuchus princeps*, sp. n.

Vertex of head pale ochraceous; pronotum sanguineous, with two pale transverse spots near anterior margin; scutellum obscure ochraceous, with a central line and two obtriangular spots on anterior margin black; tegmina stramineous, the basal angles black, apical area testaceous margined and mottled with fuscous-



Fig. 15.—*Ophiuchus princeps*.

brown; face ochraceous; body and legs pale ochraceous; vertex of head with a central longitudinal slightly carinate line; face obliquely striate on each lateral area; pronotum very finely rugulose; posterior tibiae strongly spinulose.

Length incl. tegm. 5 millim.

*Hab.* Travancore.

Genus **KANA**. (Vol. IV, p. 285.)

3539. *Kana signata*, sp. n.

Vertex of head and pronotum creamy-white, the lateral margins indistinctly pale stramineous, and with a central longitudinal sanguineous fascia which gradually narrows to apex of head; scutellum black, this black coloration extending over base of pronotum; tegmina pale stramineous, lateral margins and about

apical half of claval area black or piceous, a testaceous spot at apex of claval area posteriorly containing two black dots, two



Fig. 16.—*Kana signata*.

transverse oblique black lines on posterior half of tegminal area and two black spots on inner apical margins, the inner and posterior apical margins brownish; body beneath and legs (imperfectly seen in carded specimens) pale stramineous; vertex of head about one-third longer than pronotum, subangularly rounded anteriorly; ocelli a little in front of eyes.

Length incl. tegm.  $5\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

3540. *Kana illuminata*, sp. n.

Vertex of head, pronotum and scutellum creamy-white or pale sanguineous, with a central sanguineous longitudinal fascia which narrows at apex of head; tegmina pale stramineous, lateral



Fig. 17.—*Kana illuminata*.

margins of claval area black, a piceous elongate spot on each margin of claval suture, the apex of which is testaceous with two

small apical black dots, two transversely oblique black lines on posterior half of tegminal area and two black lines on inner apical margins, the inner and posterior apical margins dark brownish; body beneath and legs (imperfectly seen in carded specimens) pale stramineous.

Length incl. tegm.  $5\frac{1}{2}$  millim.

*Hab.* South India: Kodaikanal (*T. V. Campbell*).

3541. *Kana modesta*, sp. n.

Head, pronotum and scutellum pale stramineous, the pronotum usually a little darker in hue; tegmina more creamy-white, with three transverse black lines on posterior half of tegminal margin, two black dots at claval apex, and two black spots on inner apical margin, which is very pale fuscous; body beneath and legs (imperfectly seen in carded specimens) pale stramineous; vertex of head about one-third longer than pronotum, its apex moderately angulate.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* South India; Nilgiri Hills, Coonoor (*T. V. Campbell*).

Genus **DIDIUS**, nov.

Type, *D. sexualis*, Dist.

*Distribution.* Bengal.

Vertex of head about as long as pronotum and scutellum together, spatulate, the lateral margins strongly sinuate above the insertion of the antennæ, the basal area foveate and there strongly centrally longitudinally carinate; face very much longer than broad, strongly concavely sinuate near the insertion of the antennæ and then moderately convex to apex; pronotum almost as long as broad, angularly sinuate at base, the anterior and lateral margins almost straight; scutellum subtriangular, shorter than pronotum; tegmina (♀, — ♂ at present unknown to the writer) extending to about half the length of abdomen, their apices conically rounded; tibiæ finely spinulose, the posterior tibiæ more strongly and densely spinulose.

By the structure of the head this genus is allied to the Palæ-arctic genus *Eupelia*, Germ.

3542. *Didius sexualis*, sp. n.

♀. Vertex of head pale ochraceous, the apex macularly black and with two small black spots near basal margin, the whole surface marked with a few indistinct and ill-defined linear testaceous markings; face pale ochraceous, with the anterior margin and two short central fasciæ not reaching bases of antennæ, and an elongate spot behind the antennal bases, black; pronotum pale testaceous, with a few small foveate black spots; scutellum black; body beneath, legs and abdomen above ochraceous, abdomen linearly

marked both above and beneath with black; tegmina pale ochraceous, the inner and apical margins testaceous.

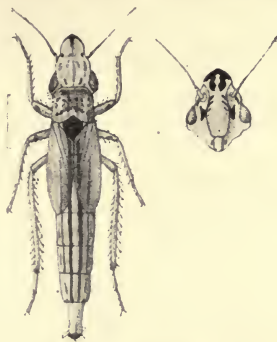


Fig. 18.—*Didius sexualis*.

Length ♀  $8\frac{1}{2}$  millim.

*Hab.* Calcutta.

I have not seen the ♂ of this species.

Genus **PLATYRETUS**. (Vol. IV, p. 289.)

**PLATYRETUS MARGINATUS**. (Vol. IV, p. 289.)

Add: *Hab.* Lower Burma; Minbu (*Bainbrigge Fletcher, Pusa Coll.*).

3543. *Platyretus connexus*, sp. n.

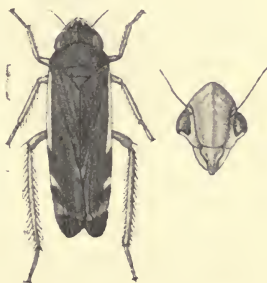


Fig. 19.—*Platyretus connexus*.

Dark chocolate-brown; anterior margin of vertex of head, inwardly preceded by a few small spots, ochraceous; lateral

margins of tegmina for about two-thirds of their length pale ochraceous, after which there is an oblique marginal spot of the same colour and a rather darker subapical transverse fascia; body beneath and legs ochraceous; vertex of head with a central longitudinal carinate line; face centrally longitudinally carinate, lateral areas obscurely transversely striate; posterior tibiæ robustly spinulose.

Length incl. tegm. 6 millim.

*Hab.* E. Himalayas; Kurseong, and Ghumti, Darjiling Distr. (*F. H. Gravely*).

**3544. *Platyretus himalayanus*, sp. n.**

Vertex of head, pronotum and scutellum black; vertex finely spotted with ochraceous on anterior margin, a central longitudinal ridge and narrow posterior margin also ochraceous; face brownish-ochraceous, the posterior area and clypeus black; tegmina pale fuscous-brown with some irregular pale greyish and ochraceous spots, the costal margin for about half its length broadly pale ochraceous, a prominent notched greyish-white spot on costal area at about two-thirds from base, before apex an almost united transverse series of small ochraceous spots; body beneath and legs ochraceous; vertex of head with the lateral and anterior margins prominently ridged and slightly recurved, and with a strong central longitudinal ridge; scutellum with a straight transverse incision near middle; face with a prominent central longitudinal ridge, the lateral areas distinctly transversely, obliquely, striated.

Length incl. tegm. 7 millim.

*Hab.* Eastern Himalayas.

**3545. *Platyretus albosignatus*, sp. n.**

Vertex of head, pronotum and scutellum castaneous-brown, anterior margin of vertex, two transverse lines on posterior margin, and a very large angulated central spot to scutellum greyish-white, the latter containing two small brown spots; face, body beneath and legs very pale ochraceous; tegmina brownish-ochraceous, with bluish-grey spots, of which two prominent ones are found on inner claval margin, a large oblong pale spot near middle of costal margin, and a similar but smaller spot near apex of costal margin, in addition to these spots are scattered dark castaneous markings of which the best defined are five oblique transverse costal lines, three before and two beyond the pale subapical costal spot; vertex of head with a central longitudinal ridge, the anterior margin not ridged; the large pale spot to scutellum centrally depressed and angulated on each side; face with a fine longitudinal central ridge and very finely striate on each lateral area.

Length incl. tegm. 7 millim.

*Hab.* Darjiling.



Genus **ACROPONA**. (Vol. IV, p. 300.)

**ACROPONA PRASINA**. (Vol. IV, p. 300.)

Add: *Hab.* S. India; Nandidrug, Salem, Chikkaballapura (*T. V. Campbell*).—Seychelle Islands.

The specimen from Chikkaballapura is a varietal or discoloured form, in which the pale green coloration is replaced by that of an ochraceous hue.

Genus **GESSIUS**. (Vol. IV, p. 301.)

**GESSIUS VERTICALIS**. (Vol. IV, p. 302.)

Add: *Hab.* E. Himalayas; Kurseong. South Kanara District; Kollur Ghat.

Genus **NAKULA**, nov.

Type, *N. multicolor*, Dist.

*Distribution.* Lower Burma.

Vertex transverse, rounded between the eyes, but almost truncate at central anterior margin, three times broader between eyes than long, outer margins of eyes almost in line with the margins of vertex; ocelli on or near anterior margin of head, nearer to eyes than to each other; face narrowing to clypeus, which is a little widened posteriorly; pronotum about three times as long as vertex, arched, lateral margins oblique for about two-thirds their length from base, its anterior margin convex, concave before scutellum, which is broader than long, its apex not slenderly produced; tegmina about three times as long as broad, four apical cells, two ante-apical cells; posterior tibiae strongly spinulose.

Allied to *Gessius* (vol. iv, p. 301).



Fig. 20.—*Nakula multicolor*.

3546. *Nakula multicolor*, sp. n.

Vertex of head and pronotum brownish-ochraceous, ocelli black, base of vertex, posterior margins of eyes, two central arcuated spots at base of pronotum, and a spot on each lateral margin of

same, sanguineous; scutellum sanguineous, a large black spot near each basal angle; head beneath brownish-ochraceous, a sanguineous spot between eyes and base of face, a marginal sanguineous spot to cheeks; body beneath and legs reddish-ochraceous; tegmina pale brownish-ochraceous, the venation darker, costal and inner claval margins narrowly sanguineous; structural characters as in generic diagnosis.

Length incl. tegm. 8 millim.

*Hab.* Lower Burma; Mergui (*W. Doherty*).

Genus **CARVAKA**, nov.

Type, *C. picturata*, Dist.

*Distribution.* Nilgiri Hills.

Vertex of head about twice as broad between eyes as long, anterior margin in a line with outer margins of eyes, which are large and oblique; face narrow, longer than broad; pronotum about twice as broad at base as long, anterior margin convexly produced between the eyes, lateral margins short, oblique, posterior margin nearly straight, very slightly concave; scutellum triangular, about twice as broad at base as greatest central length, lateral margins straightly oblique, strongly transversely impressed near middle; tegmina passing abdominal apex, three apical cells, the innermost longest, two subapical cells; posterior tibiæ moderately curved, strongly spinulose.

3547. *Carvaka picturata*, sp. n.

Vertex of head, pronotum and scutellum creamy-white or very pale stramineous; pronotum behind eyes with a transverse series



Fig. 21.—*Carvaka picturata*.

of three very small dark spots; scutellum with a large black spot near each basal angle, and with two very small spots between them;

face excluding base (which is creamy-white) dark castaneous with paler transverse striae, cheeks black, sometimes spotted with ochraceous; tegmina fuscous-brown, with paler suffusions and darker transverse and oblique black spots, principally in claval and subclaval areas, as shown in figure; legs pale ochraceous. bases of femora castaneous; structural characters as in generic diagnosis.

Length incl. tegm. 6-8 millim.

*Hab.* Nilgiri Hills; Ootacamund.

*Var.* A single specimen sent home by Dr. T. V. Campbell from Lovedale in the Nilgiris has a cruciform black central spot to the vertex of the head.

### 3548. *Carvaka thoracica*, sp. n.

Closely allied to the preceding species, but vertex of head with a large central black spot connected with the eyes by a transverse black line on each side, a linear transverse spot near inner margin of each eye; face similar to that of type species, but the cheeks with large ochraceous spots; pronotum dark grey, with two central, longitudinal, dark linear spots; scutellum creamy-white, but the basal area brownish-ochraceous with darker spots; tegmina very similar to those of preceding species; body beneath and legs ochraceous, anterior femora more or less brownish at base.

Length incl. tegm. 7-8 millim.

*Hab.* Nilgiri Hills; Lovedale (*T. V. Campbell*).

### 3549. *Carvaka modesta*, sp. n.

Vertex of head ochraceous, the anterior margin and a subapical transverse line fuscous-brown; eyes blackish; pronotum dull pale olivaceous brown; scutellum dull ochraceous; face ochraceous; body beneath and legs pale ochraceous; tegmina olivaceous brown, three darker spots on inner claval margin, posterior half of costal area distinctly but irregularly paler; vertex of head with some transverse furrows; pronotum thickly, finely, transversely striate; scutellum distinctly transversely impressed, sometimes with a distinct brownish spot in each basal angle; face very finely transversely striate.

Length incl. tegm.  $6\frac{1}{2}$ -7 millim.

*Hab.* South India; Kodaikanal, and Nilgiri Hills (*T. V. Campbell*).

### 3550. *Carvaka ochrophara*, sp. n.

Dark ochraceous; vertex of head with three linear dark spots at anterior margin (in some specimens these are practically absent); scutellum with a darker spot in each basal angle; a black transverse line at anterior margin of face between the eyes; the lateral margins of the face usually distinctly darker in coloration, and with a small black spot near the insertion of the antennae; tegmina

practically unspotted; face obscurely striate on each lateral area; pronotum thickly, finely, transversely striate; scutellum transversely impressed near middle.

Length incl. tegm. 6 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Genus **DRABESCUS**. (Vol. IV, p. 304.)

**DRABESCUS ANGULATUS**. (Vol. IV, p. 305.)

Add: *Hab.* Kumaon; Dharmoti and Chauhabattia (*A. D. Inms*).

**DRABESCUS STRAMINEUS**. (Vol. IV, p. 306.)

Add: *Hab.* Ceylon; Peradeniya (*E. E. Green*). — Sumatra (*Forbes*).

**DRABESCUS LÆTISIGNA**. (Vol. IV, p. 307.)

Add: *Hab.* Lower Burma; Mergui (*W. Doherty*).



Fig. 22.—*Drabescus lætisigna*, Walk.

Genus **KUTARA**. (Vol. IV, p. 308.)

**KUTARA BRUNNESCENS**. (Vol. IV, p. 308.)

Add: *Hab.* South India; Kodaikanal (*T. V. Campbell*).

3551. **Kutara nigrofacialis**, sp. n.

Vertex of head, pronotum and scutellum thickly, finely, mottled with fuscous; eyes dull bluish grey; scutellum with a somewhat large blackish spot at each basal angle and a smaller central basal spot; head beneath (including face) black, anterior margin between eyes and lateral margins of face pale testaceous; legs pale castaneous, tarsi and posterior tibiae ochraceous, the latter finely spotted with black; body beneath more or less shaded with black, the abdomen more brightly black; tegmina dull greyish

white, the claval area, costal margin and apical area dull ochraceous, the claval area before apex somewhat obscurely fasciated transversely with dull greyish white; vertex of head more or less rugose; pronotum somewhat rugosely transversely striate, centrally longitudinally carinate; scutellum convexly, transversely carinate before apex, and then centrally longitudinally sulcate to apex.

Length incl. tegm.  $6\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **GONIAGNATHUS**. (Vol. IV, p. 310.)

3552. *Goniagnathus fumosus*, sp. n.

Vertex of head ochraceous, somewhat thickly covered with distinct black spots; face ochraceous, transversely blackly striate, medially more or less black; pronotum black, with more or less distinct pale, transverse striation; scutellum brownish-ochraceous, the apical area distinctly blackish; tegmina brownish-ochraceous, the veins and costal area finely spotted with black; legs black. anterior and intermediate tibiæ annulated with ochraceous (sometimes these annulations are practically absent), bases of the posterior tibiæ shortly brownish-ochraceous.

Allied to *G. punctifer*, Walk., but with the vertex of head broader and less arcuated, the coloration darker (especially the black legs), face more elongate, &c.

Length incl. tegm. 6-7 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*), Coimbatore. Pusa, Behar, at light (*Bainbrigge Fletcher*). Allahabad (*A. D. Imms*).

3553. *Goniagnathus bicolor*, sp. n.

Vertex of head, pronotum and scutellum pale fuscous-brown; tegmina pale ochraceous, the whole of the claval area fuscous-brown; body beneath and legs fuscous-brown; face pale ochraceous, prominently spotted with fuscous-brown; vertex of head broad, with a narrow, median, longitudinal carina; pronotum transversely striate; tegmina with the veins on the pale area very finely spotted with brown and the dark legs beneath distinctly visible from above.

Length incl. tegm.  $7\frac{1}{2}$  millim.

*Hab.* Calcutta.

3554. *Goniagnathus obesus*, sp. n.

Body and legs pale ochraceous; tegmina sometimes with a greyish hue; apices of the intermediate and posterior femora, and apices of the posterior tibiæ, narrowly but distinctly black; anterior margin of vertex of head with a transverse curved black line; scutellum with some faint but distinct testaceous longitudinal markings; tegmina with two black spots (sometimes very indistinct) transversely situate at about one-third from apex; the tegminal veins distinct and a little darker in hue; vertex of head



narrow, broadly convex; pronotum finely transversely striate; scutellum transversely incised and depressed before apical area; face with strong, transverse, dark striation between eyes, and more or less darkly striate on lateral areas.

Length incl. tegm.  $5-5\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **THAGRIA**. (Vol. IV, p. 315.)

3555. *Thagria capitata*, sp. n.

Vertex of head, pronotum and scutellum brownish-ochraceous, apical area of vertex piceous, pronotum with fine black granules; face black; sternum and body beneath black or blackish; legs and abdominal segmental margins pale ochraceous; tegmina brownish-ochraceous, thickly speckled with black; vertex of head about twice as long as broad; scutellum a little longer than pronotum, distinctly impressed before apex, centrally longitudinally carinate; apex of vertex of head distinctly produced and obtusely acute, the lateral margins strongly ridged.

Length incl. tegm.  $6-6\frac{1}{2}$  millim.

*Hab.* Nilgiri Hills; Coonoor (*T. V. Campbell*).

Allied to *T. pedestris*, Dist. (vol. iv, p. 316), but distinguished by the more elongate and much narrower vertex of the head.

3556. *Thagria difformis*, sp. n.

Vertex of head, pronotum and scutellum dull ochraceous, vertex with two black spots—one near apex, the other near middle, two small black spots on disk of pronotum and two similar spots at base of scutellum, pronotum also finely, darkly speckled; face dark ochraceous, blackly transversely striate, a pale spot at base and apex, lateral areas before eyes black, cheeks greyish with some darker speckles; body beneath black or blackish; legs ochraceous, apices of posterior tibiæ black, posterior tarsi black, annulated with ochraceous; tegmina ochraceous, with black and greyish speckles, two large greyish spots near claval apex and a smaller greyish spot on costal margin near apex; head almost twice as long as broad, apex angular, lateral margins somewhat acutely ridged; scutellum distinctly shorter than pronotum.

Length incl. tegm.  $5\frac{1}{2}$  millim.

*Hab.* Ceylon; Hakgala (*E. E. Green*).

A species at once recognised by the small scutellum, which contrasts with a generic character of *Thagria* and allies it to *Mukwana* (vol. iv, p. 317).

Genus **VARTA**. (Vol. IV, p. 320.)

*VARTA RUBROFASCIATA*. (Vol. IV, p. 321.)

Add: *Hab.* S. India; Chikkaballapura (*T. V. Campbell*).  
Assam-Bhutan Frontier, Mangaldai (*S. W. Kemp, Ind. Mus.*).



Genus **COROTICUS**, nov.

Type, *C. tessellatus*, Dist.

*Distribution.* British India.

Vertex of head longer than breadth between eyes, apically narrowed and subacute, ocelli beneath near eyes, margins of vertex ridged, the disk thus having a foveate or excavate appearance; face very long and narrow, anteriorly subacutely produced before eyes, where it is broadest; pronotum about as long as vertex, its anterior margin distinctly convex between the eyes, posterior margin nearly straight, lateral margins short and moderately oblique; scutellum moderately short and broad; tegmina a little longer than abdomen, apical cells three, the uppermost preceded by two subapical cells.

Allied to *Varta*, Dist.

3557. *Coroticus tessellatus*, sp. n.

Vertex of head pale brownish-ochraceous; pronotum dark brownish-ochraceous; scutellum anteriorly blackish, the posterior area more or less greyish white; face dark fuscous-brown, the anterior margin in front of eyes ochraceous; body beneath fuscous-brown; legs pale ochraceous; tegmina pale ochraceous,



Fig. 23.—*Coroticus tessellatus*.

with numerous brownish tessellate markings, a large costal space near middle containing four small dark spots, a pale claval spot, a smaller discal tegminal spot, one near apex of costal margin, and the inner subapical cell also pale; other structural characters as in generic diagnosis.

Length incl. tegm. 5 millim.

*Hab.* Kumaon.

Genus **CUNEDDA**, nov.Type, *C. phæops*, Dist.*Distribution.* Assam.

Vertex of head longer than pronotum, narrowed in front of eyes and apically subacute, marginally and medially longitudinally ridged, thus giving the lateral areas a foveate or excavate appearance; face much longer than broad, projecting far in front of eyes, apically subacutely narrowed and centrally longitudinally ridged; pronotum at base about twice as broad as long, the lateral margins a little produced and rounded behind eyes, anterior margin convex between eyes; scutellum much broader at base than long, subtriangular; tegmina passing abdominal apex, four apical cells, a short angulated transverse vein on subcostal area at about one-fourth from base; posterior tibiæ strongly spinulose.

3558. *Cunedda phæops*, sp. n.

Vertex of head pale fuscous-brown, with three black marginal spots, one at apex and one a little in front of each eye; face blackish, margins in front of eyes more or less ochraceous; tegmina dark stramineous, the costal area paler and almost hyaline, a

Fig. 24.—*Cunedda phæops*.

transverse series of four subapical black spots, the outermost largest, beyond middle of claval margins a small dark spot with a pale margin; body beneath fuscous-brown, the legs pale ochraceous; structural characters as in generic diagnosis.

Length incl. tegm. 5 millim.

*Hab.* Assam.

Genus **SABIMA**. (Vol. IV, p. 324.)3559. *Sabima aryana*, sp. n.

Brownish-ochraceous, thickly speckled with black; tegmina with an ochraceous costal spot about one-third before apex, and

some small ochraceous spots on apical area; face and clypeus ochraceous with minute darker speckles, margins of each narrowly more or less black; body beneath blackish; legs brownish-ochraceous, posterior tibiae margined with black; vertex of head a little longer than broad between eyes, the lateral margins distinctly carinate; face angularly but not elongately produced in front of eyes, its anterior margin more prominently black, about twice as long as greatest breadth.

Length incl. tegm.  $8\frac{1}{2}$  millim.

*Hab.* Darjiling.

Genus **JASSUS**. (Vol. IV, p. 327.)

**JASSUS INDICUS**. (Vol. IV, p. 327.)

Add: *Hab.* South India; Salem, Kodaikanal and Nandidrug (*T. V. Campbell*). Orissa; Khandagiri (*Gravelly*). Lower Burma; Mergui (*Doherty*). Andaman Islands; Port Blair (*Kemp*). Seychelle Islands.

**JASSUS PAUPERCULUS**. (Vol. IV, p. 332.)

Add: *Hab.* South India; Kodaikanal, and Nilgiri Hills, Coonoor, Lovedale (*T. V. Campbell*). E. Himalayas; Kurseong (*N. Annandale*), Shamadang (*Ind. Mus.*).

I have previously drawn attention to the variability of coloration found in this species. A long series of specimens sent home by Dr. Campbell shows that the posterior femora and tibiae are sometimes nearly wholly black, and in others the tegmina are without the pale costal margin and also have the black ground-colour less intense.

The specimens I described as *J. nocturnus* (vol. iv, p. 332) may also prove to be another variety of *J. pauperculus*.

3560. **Jassus fryeri**, sp. n.

Head ochraceous, vertex with the anterior marginal area sanguineous, the basal margin much more narrowly so, face with the anterior margin narrowly sanguineous; pronotum dull ochraceous speckled with fuscous-brown; scutellum dull ochraceous, with two longitudinal fuscous-brown lines; abdomen beneath more or less piceous; legs brownish-ochraceous, posterior tibiae and tarsi (excluding bases) black; tegmina dull ochraceous, the veins fuscous-brown, the claval and apical areas dark castaneous with somewhat large greyish-white spots, inner claval margin with numerous transverse dark lines, disk with dark longitudinal linear spots; vertex of head a little longer than broad, narrowing posteriorly, anterior margin ridged and a little recurved; face elongate, about twice as long as broad, on anterior area distinctly transversely striate;

pronotum twice as broad as long; scutellum triangular, about as long or very slightly longer than greatest middle length of pronotum.

Length incl. tegm. 6 millim.

*Hab.* Ceylon; Newara Eliya (*J. C. F. Fryer*).

**3561. *Jassus albororatus*, sp. n.**

Head ochraceous, vertex longitudinally sanguineous on lateral areas, face prominently and somewhat closely transversely castaneously striate on each lateral area, the posterior margin narrowly black; pronotum pale ochraceous, spotted and transversely narrowly fasciated with black; scutellum pale ochraceous, a small spot at each basal angle, and with a discal cluster of spots, black; femora (excluding apices) black, apices of femora and the tibiæ and tarsi ochraceous, apices of tarsi and inner margins and apices of posterior tibiæ black or blackish; tegmina pale ochraceous and brownish, all the veins darker and closely spotted with white, the apical margin black and spotted with white; vertex of head somewhat broad, slightly longer than broad and centrally longitudinally carinate, the lateral margins also carinate; face elongate, more than twice as broad as long, the lateral margins slightly rounded; scutellum apically acute, about as long as, or very slightly longer than pronotum.

Length incl. tegm.  $7\frac{1}{2}$  millim.

*Hab.* South India; Nandidrug (*T. V. Campbell*).

**3562. *Jassus coonoorensis*, sp. n.**

Head pale ochraceous; face on lateral areas with very fine, dark, transverse striation; pronotum and scutellum dark or brownish ochraceous; legs ochraceous, posterior tibiæ (excluding basal areas) and apices of the tarsi black; tegmina brownish-ochraceous with paler spots, costal area paler with transverse linear markings, apical area darker and containing three large and prominent ocellated spots, which are pale ochraceous with black centres; vertex of head a little longer than frontal margin, obliquely narrowing to base, the lateral margins ridged; face elongate, more than twice as long as broad, with a faint, central, longitudinal ridge; pronotum a little shorter than scutellum, thickly, very finely granulate, with a slender central longitudinal ridge not reaching basal margin; scutellum with a distinct central longitudinal ridge and a similar ridge near each basal angle, apex angulate but not prominently acute.

Length incl. tegm. 6–8 millim.

*Hab.* Nilgiri Hills; Coonoor (*T. V. Campbell*).

The three large ocellated spots on the apical areas of the tegmina assist a superficial recognition of this species.

3563. *Jassus excelsus*, sp. n.

Head pale ochraceous, vertex with four black spots—two near anterior and two near posterior margins; face with the lateral margins prominently black, and a black central fasciate spot to clypeus; pronotum ochraceous, closely and finely speckled with black; scutellum ochraceous, speckled with black, a large elongate spot at each basal angle, a central transverse spot on anterior margin, and a curved linear spot before apex, black; tegmina pale bronzy-brown, the veins darker and minutely spotted with pale ochraceous; legs ochraceous, apices of tarsi and inner margins of posterior tibiæ black; vertex of head about as long as anteriorly broad, obliquely, moderately narrowed to base, with a central, fine longitudinal carina, the lateral margins more distinctly carinate; face elongate, slightly more than twice as long as broad; scutellum about as long as pronotum, its apex acute.

Length incl. tegm. 10 millim.

*Hab.* Upper Burma; Lashio, 3000 feet (*Bainbrigge Fletcher*).

3564. *Jassus brevis*.

*Tettigonia brevis*, *Walk. List Hom.* iii, p. 774 (1851).

*Cœlidia brevis*, *Stål, Ofv. Vet.-Ak. Förh.* 1862, p. 494.

*Jassus brevis*, *Dist. Rec. Ind. Mus.* ii, p. 150 (1908).

Head black, vertex ochraceous, with two small black spots near anterior margin; face with the anterior margin and pronotum and scutellum black, the pronotum with minute paler freckles; body beneath and legs black or blackish, apical halves of the posterior tibiæ usually paler and more fuscous in hue; tegmina black, crossed by a broad transverse fascia near apex of scutellum, and another (narrowed inwardly) near base of apical area, stramineous.

Allied to *J. percultus*, *Dist.* (vol. iv, p. 337), but a larger species, the pale fasciæ broader and the pronotum black; vertex of head broader, &c.

Length incl. tegm. 7–9 millim.

*Hab.* Upper Burma; Lashio (*Bainbrigge Fletcher*).—China; Hongkong (*Brit. Mus.*).

A species was described by Herr.-Schæff. (*Faun. Germ.* 143, 15) as *Jassus brevis*. This is a Palæarctic species, and has been correctly placed by Oshanin in the genus *Goniagnathus*. There is therefore no necessity to alter the specific name of the above insect.

3565. *Jassus ostentus*, sp. n.

Head ochraceous; face black, its margins ochraceous; pronotum and scutellum black; body beneath (imperfectly seen in mounted type) black or blackish, with ochraceous fasciate markings; legs ochraceous; tegmina black, claval area (excluding base and apex), costal area widening posteriorly and connected with apical area, ochraceous; vertex of head about as broad as anterior

margin as long; face elongate, about twice as long as broad, its lateral areas faintly transversely carinate; pronotum thickly and very finely granulate, about as long as scutellum.

Length incl. tegm.  $7\frac{1}{2}$  millim.

*Hab.* Travancore.

Genus **ÆTERNUS**, nov.

Type, *Æ. hieroglyphicus*, Dist.

*Distribution.* Tenasserim.

Vertex short, broad, rounded in front, much shorter than breadth between eyes, the anterior margin in line with the outer margins of eyes, which are large, obliquely directed backwardly over the lateral angles of the pronotum; face elongate, nearly twice longer than broad; moderately narrowed to clypeus; pronotum short, nearly three times broader than long, the posterior margin truncate, the anterior margin convex between the eyes, the lateral margins a little subconvexly amplified; scutellum about half as long as broad at base, the lateral margins roundly sinuate, the apex subacute, transversely impressed near middle; tegmina about four times longer than broad, costal and apical margins a little rounded, four distinct apical cells.

Allied to *Kunasia*, Dist. (vol. iv, p. 339).

3566. *Æternus hieroglyphicus*, sp. n.

Head stramineous, eyes black; face with a discal elongate, angular defined space, the margins of which are black and very

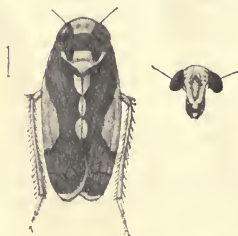


Fig. 25.—*Æternus hieroglyphicus*.

shortly and obsoletely striate, a longitudinal series of small dark spots before each eye; pronotum fuscous-brown; scutellum stramineous, with a large angulated black spot near each basal angle; body beneath and legs more or less ochraceous, the sternum and cheeks with fuscous suffusions; tegmina pale brownish, the veins darker, a large pale subhyaline costal spot near middle, and



the apical margin of the same colour, three stramineous spots in elongate series divided by the claval suture; structural characters as in generic diagnosis.

Length incl. tegm. 5 millim.

*Hab.* Tenasserim, mountains on Siam Border (*K. G. Gairdner*).

### Genus **PHRYNOMORPHUS**,

*Phrynomorphus*, *Curtis, Entomol. Mag.* i, p. 194 (1833); *Jac.*

*Kilimand. Exped.* ii, No. 7, Hem. Hom., p. 130 (1910).

*Athysanus*, *Burm.* (vol. iv, p. 343).

*Jacobi (supra)* has pointed out that *Curtis's* genus has priority over *Burmeister's*.

**PHRYNOMORPHUS (ATHYSANUS) FUSCONERVOSUS.** (Vol. IV, p. 344.)

Add: *Hab.* South India; Kodaikanal and Nilgiri Hills (*T. V. Campbell*).

**PHRYNOMORPHUS (ATHYSANUS) INDICUS.** (Vol. IV, p. 344.)

Add: *Hab.* Punjab; Lahore.

**PHRYNOMORPHUS (ATHYSANUS) ATKINSONI.** (Vol. IV, p. 345.)

Add: *Hab.* South India; Nandidrug, Chikkaballapura (*T. V. Campbell*).

**PHRYNOMORPHUS (ATHYSANUS) NANUS.** (Vol. IV, p. 345.)

Add: *Hab.* South India; Nandidrug, Chikkaballapura (*T. V. Campbell*), Marikuppam (*Ind. Mus.*). Satara Distr., Yenna Valley, Medha (*F. H. Gravely*).

In a short series sent by Dr. Campbell from South India there are small specimens not measuring in length more than  $3\frac{1}{2}$  millim. Other specimens in the same collection are larger and, as previously described, attain to 4-5 millim.

### 3567. *Phrynomorphus ootacamundus*, sp. n.

Vertex of head greyish-white, two transverse spots on anterior margin and a curved transverse fascia between the eyes centrally connected with the apex, black; face ochraceous, transversely blackly striate on anterior area and with a central black longitudinal fascia on posterior area, the lateral margins of this area also black; pronotum bronzy-olivaceous, the anterior marginal area more or less ochraceous, with a number of small black spots; scutellum ochraceous, with a central longitudinal fascia and a spot near each basal angle black; sternum blackish, its segmental margins pale ochraceous; (abdomen beneath imperfectly seen in carded type); legs ochraceous, longitudinally streaked with black, tarsi black; tegmina pale shining bronzy-brown, an irregular broad blackish fascia outside claval area, the remaining area paler

and more greyish; vertex of head with a fine, central, longitudinal carina; pronotum somewhat thickly striate, less so on anterior area; scutellum moderately centrally depressed; posterior tibial spinules somewhat long.

Length incl. tegm. 4 millim.

*Hab.* South India; Ootacamund (*T. V. Campbell*).

**3568. *Phrynomorphus olivaceus*, sp. n.**

Vertex of head pale ochraceous, with darker mottlings; pronotum and scutellum pale olivaceous, the first with its anterior margin ochraceous, the latter with two elongate black spots at middle of anterior area; face pale olivaceous; legs ochraceous; (body beneath imperfectly seen in carded type); tegmina bronzy-olivaceous, basal area pale olivaceous; vertex of head with a fine, central, longitudinal carina; pronotum finely, closely, transversely striate; scutellum finely transversely incised near middle.

Length incl. tegm. 5 millim.

*Hab.* Calcutta.

**3569. *Phrynomorphus coronatus*, sp. n.**

Vertex of head ochraceous, two small spots on anterior margin and a transverse fascia between anterior margins of eyes, black; head beneath, including face, ochraceous; pronotum and scutellum pale olivaceous, the latter with a small black spot near each basal angle; body beneath and legs ochraceous, sternal spots and margins of abdominal segments black; tegmina olivaceous, costal margin narrowly ochraceous and beyond middle reflecting more broadly the ochraceous lateral abdominal margin beneath; vertex of head very finely, centrally, longitudinally carinate, much broader than long, the anterior margin convexly rounded; lateral areas of face very finely darkly striate, its disk with a central longitudinal linear brown fascia.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* N.W. India; Kumaon.

**Genus TREBELLIUS, nov.**

Type, *T. albifrons*, Dist.

*Distribution.* British India.

Vertex of head about as long as breadth between eyes, subconically produced anteriorly; face convex, longer than broad, moderately narrowed posteriorly towards clypeus; pronotum at base twice as broad as long, the anterior angular margins covered by the oblique posteriorly-directed eyes, anterior margin moderately rounded between eyes, posterior margin truncate; scutellum about as long as pronotum, the apex acute; tegmina about four times as long as broad, four apical cells, and an elongate subcostal ante-apical cell; posterior tibiae with long, strong spinules.

3570. *Trebellius albifrons*, sp. n.

Vertex of head greyish-white, with about the apical half black, and a small black spot near each eye; face black, more castaneous towards apex, and with two large prominent greyish-white spots near middle; cheeks castaneous-brown, with an oblique greyish-white fascia; pronotum pale ochraceous, the anterior and posterior margins castaneous-brown; scutellum pale ochraceous,

Fig. 26.—*Trebellius albifrons*.

with two small darker central spots on basal half; body beneath and legs dull ochraceous, anterior femora blackly biannulate, base and apex of genital process castaneous-brown; tegmina pale bronzy-brown, the venation greyish-white, the apical marginal area distinctly darker; posterior tibiae with small dark spots at the bases of the spinules.

Length incl. tegm. 5 millim.

*Hab.* United Provinces; Allahabad District.

Genus **PRASUTAGUS**, nov.

Type, *P. pulchellus*, Dist.

*Distribution.* South India.

♀. Vertex of head slightly longer than pronotum, robust, produced and subconically rounded in front of eyes; face flattened, but imperfectly seen in carded type; pronotum convex between eyes, basal margin truncate; scutellum finely transversely impressed before apex; tegmina in ♀ not reaching abdominal apex, about two and a half times as long as broad, their apical margins oblique, three apical and two ante-apical cells; posterior tibiae longly, strongly spinulose.

3571. *Prasutagus pulchellus*, sp. n.

Vertex of head, pronotum and scutellum stramineous, vertex with two darker spots near apical margin; scutellum with a narrow, central, longitudinal darker fascia and two small darker spots near base; face black; tegmina slaty-brown, the venation

broadly greyish, the apical margin macularly castaneous; exposed apical area of abdomen stramineous; femora black, anterior and



Fig. 27.—*Prasutagus pulchellus*.

intermediate tibiæ ochraceous, posterior tibiæ mostly black, the outer margins ochraceous, posterior tarsi (excluding base) black; structural characters as in generic diagnosis.

Length incl. abd. append. ♀  $4\frac{1}{2}$  millim.

*Hab.* South India; Nandidrug (*T. V. Campbell*).

Genus **PHLEPSIUS**. (Vol. IV, p. 346.)

**PHLEPSIUS DIVARICATUS**. (Vol. IV, p. 346.)

Add: *Hab.* South India; Kodaikanal and Nilgiri Hills (*T. V. Campbell*).

Genus **XESTOCEPHALUS**. (Vol. IV, p. 348.)

**XESTOCEPHALUS PAGANURUS**, *Melich.* (vol. iv, p. 350); *Notes Leyd. Mus.* xxxvi, p. 139 (1914).

*Xestoccephalus pardalinus*, *Dist.* (vol. iv, p. 350).

Dr. Melichar has given this synonymy, which I follow; as stated, I had not seen his species.

3572. **Xestoccephalus relatus**, sp. n.

Head, pronotum, scutellum and legs dull ochraceous, face paler, eyes black; tegmina pale ochraceous, with a spot at basal angle, three oblique fasciæ (the first and second slightly broken and macular, the third—near apex—continuous) and the apical margin, fuscous-brown; vertex of head about as long as pronotum, anteriorly rounded; face a little longer than broad.

Length incl. tegm. 3 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Apparently allied to *X. apicalis*, *Melich.*, but without the central milk-white round spot on the tegminal costal margin as described by Melichar.

3573. *Xestocephalus nilgiriensis*, sp. n.

Head, pronotum, scutellum, body beneath and legs pale ochraceous, a dark spot at each basal angle of the scutellum; tegmina pale ochraceous, a waved broken macular fascia at a short distance from base, followed by two spots, one inside and the other just outside claval area, a waved transverse fascia near middle and a somewhat similar fascia beyond middle, followed by a spot on inner margin and a short subapical fascia, black; vertex of head shorter than pronotum, its anterior margin rounded; face scarcely longer than width at base, distinctly narrowing towards apex.

In some varietal specimens there is a dark spot at basal angle of tegmina.

Length incl. tegm. 4 millim.

*Hab.* Nilgiri Hills; Lovedale (*T. V. Campbell*).

3574. *Xestocephalus transversus*, sp. n.

Head, pronotum, scutellum, body beneath and legs pale ochraceous; basal and apical margins of vertex, a medial transverse fascia to pronotum, and a spot near each basal angle of scutellum, fuscous-brown; tegmina pale ochraceous, four elongate spots in claval area (a cluster of three near middle, and one at apex), and an outer marginal series of spots, black; vertex of head about as long as pronotum and somewhat conically rounded anteriorly; face imperfectly seen in carded unique type.

Length incl. tegm. 3 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

3575. *Xestocephalus dissimilis*, sp. n.

Head, pronotum and scutellum ochraceous, eyes black; vertex speckled with brown; pronotum with a small black spot behind each eye, and before and between these spots two small transverse linear dark impressions; scutellum with some small obscure pale spots, the extreme apex with a similar pale margin; tegmina dull pale ochraceous, three small spots on claval inner margin, two on posterior half of costal margin, and three on disk, black; the tegmina have also irregular greyish mottlings; vertex of head about as long as pronotum, its anterior margin somewhat conically rounded; face distinctly narrowed towards clypeus, some minute darker spots on anterior margin between the eyes, and with a pale longitudinal spot before apex.

Length incl. tegm. 4 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **BANUS**. (Vol. IV, p. 353.)

3576. *Banus maculosus*, sp. n.

Pale ochraceous; vertex of head with irregular piceous markings, which consist principally of an anterior submarginal series of small spots and a little larger spot near the inner margin of each eye; pronotum with a continuous macular piceous fascia on

anterior marginal area; abdomen beneath pale ochraceous, the segmental margins brownish and somewhat macular, abdomen above castaneous, the segmental margins narrowly ochraceous; legs ochraceous, posterior tibiæ minutely and sparsely spotted with castaneous; tegmina shining ochraceous, with five small marginal castaneous spots, viz., two on costal margin behind middle and three on inner claval margin.

Length incl. tegm. 6 millim.

*Hab.* E. Himalayas; Kurseong (*N. Annandale*).

Allied to *B. oblatus* (vol. iv, p. 353), but a larger species, the vertex of head less conically produced; the spotted tegmina and posterior tibiæ also distinct.

Genus **DIO**, nov.

Type, *D. facialis*, Dist.

*Distribution.* N. Himalayas.

Vertex of head short and broad, about half as long as breadth between eyes, obtusely, angularly produced anteriorly; face very long, narrowing to clypeus, twice as long as greatest breadth between eyes, the lateral areas obliquely depressed; pronotum about half as long as broad at base, anterior margin moderately convex, the basal lateral angles rounded; (scutellum in type mutilated in pinning process); tegmina more than three times longer than broad, three apical cells and two short and somewhat broad ante-apical cells; posterior tibiæ longly spinulose.

A genus somewhat peculiar by the short vertex combined with the very long face.

3577. *Dio facialis*, sp. n.

Head and pronotum dull greenish-ochraceous, ornamented with numerous small black spots which do not extend to the base of the

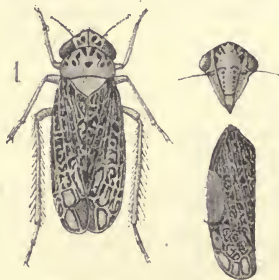


Fig. 28.—*Dio facialis*.

pronotum; face dull ochraceous, with very small irregular black spots on upper area, and minute black striations on the lateral



areas of posterior half; (scutellum mutilated); abdomen beneath more or less shaded with piceous; legs ochraceous; tegmina greenish-ochraceous, with darker tessellate markings and a large oblong bluish spot near middle of costal area; structural characters as in generic diagnosis.

Length incl. tegm. 3 millim.

*Hab.* Eastern Himalayas.

Genus **OOTACAMUNDUS**, nov.

Type, *O. typicus*, Dist.

*Distribution.* South India.

Vertex of head in a line with outer margins of eyes, narrowed and subconically produced anteriorly, more than half as long as width at base; (face indistinctly seen in *carded* typical specimen); pronotum subequal in length to scutellum, about half as long as breadth at base, convex, anterior margin convexly rounded, posterior margin a little concave; scutellum about half as long as breadth at base; the apex acute, the lateral margins slightly sinuate, transversely impressed before apex; tegmina nearly four times as long as broad, three long apical cells; posterior tibiae slightly curved and strongly spinulose.

3578. *Ootacamundus typicus*, sp. n.

Head, pronotum, scutellum, body beneath and legs pale fuscous-brown; apices of anterior femora and tibiae distinctly paler;



Fig. 29.—*Ootacamundus typicus*.

tegmina dull fuscous-brown, the subapical area paler and more ochraceous, with oblique darker spots; structural characters as in generic diagnosis.

Length incl. tegm. 4 millim.

*Hab.* South India; Ootacamund (*T. V. Campbell*).

3579. *Ootacamundus minutus*, sp. n.

Vertex of head ochraceous, eyes black; pronotum and scutellum dull ochraceous, the latter with a shining black spot near each basal angle; face, head beneath, body beneath and legs ochraceous; tegmina pale greyish-white, with oblique pale brownish, somewhat macular fasciæ.

Length incl. tegm.  $2\frac{1}{2}$  millim.

*Hab.* Bengal.

A very small species distinguished by its pale coloration, the spotted scutellum, oblique macular fasciæ to tegmina, &c.

Genus **LAMPRIIDIUS**, nov.

Type, *L. spectabilis*, Dist.

*Distribution.* Burma.

Vertex of head considerably shorter than breadth between eyes, subangularly produced anteriorly, the lateral margins almost in a direct line with eyes, which obliquely extend posteriorly over the anterior pronotal angles; face considerably longer than broad, concavely sinuate near eyes, moderately narrowed at apex; pronotum twice as broad as long, the anterior margin convexly rounded between the eyes, posterior margin truncate; scutellum a little shorter than pronotum, subtriangular; tegmina about four times as long as broad, four apical cells, the venation on apical area robust; posterior tibiæ longly spinulose.

3580. *Lampridius spectabilis*, sp. n.

Vertex of head, pronotum and scutellum dull greyish, vertex with a convex fascia between the eyes, three spots in transverse series on pronotum and a large central spot on scutellum, bright sanguineous; face, body beneath and legs very pale ochraceous; tegmina with about basal two-thirds virescent, three large spots

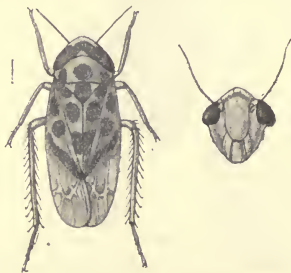


Fig. 30.—*Lampridius spectabilis*.

in claval area, two outside claval margin, and an oblique, moderately sinuate fascia extending from claval apex to near costal margin,

bright sanguineous, about apical third pale brownish-ochraceous, with the venation greyish-white; face convex, with an obscure central longitudinal ridge on posterior half; other structural characters as in generic diagnosis.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* Burma; Dawna Hills.

Genus **DIVITIACUS**, nov.

Type, *D. primus*, Dist.

*Distribution.* Nilgiri Hills.

Vertex of head a little more than half as long as the space between eyes, moderately conically produced anteriorly; face longer than broad, narrowed towards clypeus, ocelli on each side between face and anterior margins of eyes; pronotum about half as long as width at base, anterior margin moderately convex, posterior margin truncate; scutellum about half as long as width at base, subtriangular, transversely impressed near middle; tegmina more than four times as long as broad, four apical and two elongate subapical cells; posterior tibiæ longly spinulose, anterior and intermediate tibiæ more shortly and finely spinulose.

3581. *Divitiacus primus*, sp. n.

Pale stramineous; anterior margin of vertex of head spotted with black, and usually a small black spot on each side near base and near inner margins of eyes, an ocellated black spot beneath

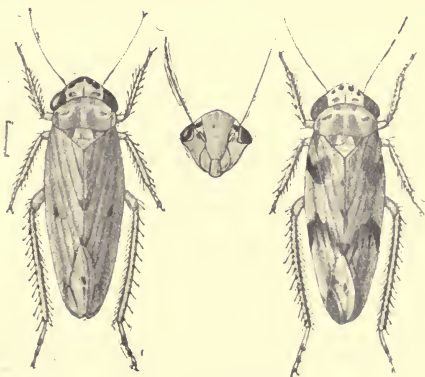


Fig. 31.—*Divitiacus primus*.

on each side of face near anterior inner margins of eyes; pronotum with two darker, sometimes evanescent fasciæ; scutellum with a dark spot at each basal angle; tegmina usually with three dark spots on each inner claval margin, a discal spot near costal

area and some linear apical spots; inner margins of posterior tibiæ and minute spots at bases of spinules black or blackish; structural characters as in generic diagnosis.

*Var.* (right hand figure). Tegmina with prominent black suffusions.

Length incl. tegm. 6 millim.

*Hab.* Nilgiri Hills; Ootacamund (*T. V. Campbell*).

Genus **NEPHOTETTIX**. (Vol. IV, p. 359.)

**NEPHOTETTIX APICALIS**. (Vol. IV, p. 360, fig. 229.)

When enumerating and figuring this species (*supra*), I stated that I had seen only male specimens. I have since received from Peradeniya, Ceylon, a locality already recorded for the other sex, a series of female examples. In this sex the tegmina are yellowish-virescent and unspotted, the apical third being more or less very pale purplish, with its costal margin greyish-white. The face has only the basal area black.

Genus **EUTETTIX**. (Vol. IV, p. 362.)

**EUTETTIX PHYCITIS**. (Vol. IV, p. 363.)

Add: *Hab.* South India; Kodaikanal (*T. V. Campbell*).

3582. **Eutettix lugubris**, sp. n.

Vertex of head and face pale bright ochraceous; pronotum pale greenish, its basal margin marked with irregular fuscous-brown maculations; scutellum fuscous-brown, the basal angles a little darker; femora fuscous-brown with their apices paler, anterior and intermediate tibiæ ochraceous with a few very small black spots, posterior tibiæ more prominently spotted with black, their inner margin also blackish; tegmina dull greyish, thickly and minutely spotted with brownish, the inner marginal area of the claval suture, a subapical sinuate line, and the apical margin darker; scutellum strongly transversely impressed near middle.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

3583. **Eutettix bengalensis**, sp. n.

Head, pronotum and scutellum ochraceous; vertex with two small dark spots on disk near eyes; pronotum with some darker suffusion on basal area; scutellum with two small dark spots on anterior margin, a series of still smaller spots on lateral margins, and a slender cruciform dark mark on disk; body beneath and legs ochraceous, posterior tibiæ with small blackish spots; tegmina dull greyish, with very small sub-obsolete darker spots, more developed on costal margin, a large dark ochraceous spot or patch

on each side of claval suture, interiorly (at the suture itself) marked with greyish-white, the apical lateral marginal areas brownish-ochraceous with small white spots; vertex of head a



Fig. 32.—*Eutettix bengalensis*.

little more than half as long as width between eyes, the anterior margin a little conically produced; scutellum almost as long as pronotum.

Length incl. tegm.  $3\frac{1}{2}$  millim.

*Hab.* Calcutta.

#### Genus **DIVUS**. (Vol. IV, p. 365.)

**DIVUS BIPUNCTATUS**. (Vol. IV, p. 365.)

Add: *Hab.* South India; Nandidrug (*T. V. Campbell*).

In a specimen sent by Dr. Campbell, the posterior lateral and apical margins of the face are black.

#### Genus **GUNGHUYANA**.

Gunghuyana, *Dist., Insecta Transvaal*, p. 244 (1910).

Type, *G. gazana*, *Dist.*, a South-African species.

*Distribution.* Ceylon; Rhodesia.

Vertex of head nearly twice as broad as long, obliquely rounded anteriorly, the lateral margins in a line with the outer margins of the eyes, ocelli on the anterior margin near apex; face very much longer than width at base, the lateral margins more or less concavely sinuate opposite the eyes, obliquely narrowed before clypeus, which is only about one-third the length of face and narrow; pronotum a little longer than scutellum and more distinctly longer than vertex, obliquely rounded anteriorly, the basal margin more or less truncate, convexly arched; scutellum subtriangular; legs of moderate length, the posterior tibiae strongly spinulose; tegmina about four times as long as broad, with three ante-apical and four apical cells.

3584. *Gunghuyana cingalensis*, sp. n.

Ochraceous; vertex of head distinctly paler, with two prominent black spots near eyes and with a subprominent central darker longitudinal line; pronotum convex, anteriorly declivous towards base of head; scutellum transversely impressed near middle; face,



Fig. 33.—*Gunghuyana cingalensis*.

body beneath and legs pale ochraceous; tegmina ochraceous, beyond claval area and excepting costal margin pale hyaline; legs pale ochraceous; structural characters as in generic diagnosis.

Length incl. tegm. 8 millim.

*Hab.* Ceylon; Maskeliya (*E. E. Green*).

Genus **PARALIMNUS**. (Vol. IV, p. 395.)

**PARALIMNUS LATERALIS**. (Vol. IV, p. 395.)

Add: *Hab.* Nilgiri Hills (*T. V. Campbell*).

**PARALIMNUS ALBOMACULATUS**. (Vol. IV, p. 397.)

Add: *Hab.* Bengal; Chapra (*Mackenzie*), Sihar (*Pusa Mus.*), Kusteia (*Jenkins*). Bombay Prov.; W. Ghats, Igatpuri (*N. Annandale*). Allahabad (*B. Lord*). Dum Dum, near Calcutta (*B. Lord*). Netrakona, Mymensingh Distr. (*J. N. Bagchi*). Ceylon; Peradeniya (*Green*), Trincomali.

3585. *Paralimnus facialis*, sp. n.

Head, pronotum and scutellum ochraceous; vertex of head with the anterior margin black, preceded by a pale ochraceous line; face with the lateral margins broadly castaneous; body beneath



and legs pale ochraceous; tegmina ochraceous, posterior costal and apical areas pale and subhyaline, with the veins and three costal spots brownish-ochraceous; vertex somewhat acutely produced anteriorly; scutellum with a distinct transverse incision near middle; pronotum with an anterior submarginal transverse impression.

Length incl. tegm. 5 millim.

*Hab.* Assam; Margherita (*Doherty*).

3586. *Paralimnus lefroyi*, sp. n.

Head, pronotum and scutellum dull ochraceous; scutellum with a black spot near each basal angle; on anterior margin of vertex two transverse black lines; body beneath dull ochraceous, legs pale ochraceous; tegmina pale ochraceous, with scattered white macular markings, the apical areas greyish-white where the veins are dark, and there are three blackish costal spots; posterior tarsi black, with their bases and apices greyish-white; vertex of head subconically produced anteriorly; pronotum with a transverse impression before anterior margin continued on each side beneath eyes; scutellum transversely impressed near middle.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* Pusa (*H. M. Lefroy*).

Genus **NEOALITURUS**, n. nom.

*Aliturus*, *Dist. Faun. Brit. Ind., Rhynch.* iv, p. 398 (1908).

Fairmaire having used this generic name in *Coleoptera* (1902), I am compelled to rename my genus.

**NEOALITURUS GARDINERI**.

*Aliturus gardineri*, *Dist.* (vol. iv, p. 398, fig. 247).

Genus **MAHALANA**, nov.

Type, *M. fidelis*, *Dist.*

*Distribution.* N.W. India.

Vertex of head subangulate, central length about equal to space between eyes; face elongate, considerably longer than broad, lateral margins behind eyes nearly straight, with a moderate central convex ridge; pronotum about twice as broad as long, posterior margin straight, anterior margin subconvex; scutellum at base nearly twice as broad as long, the lateral margins straight; tegmina elongate, about three times as long as broad, costal area broad, transversely veined, ante-apical cell very long.

This genus is allied to *Scaphoideus*, Uhler, and *Aconura*, Leth.

3587. *Mahalana fidelis*, sp. n.

Vertex of head ochraceous, with a series of minute greyish-white spots at basal margin and two small dark spots near apex;

pronotum and scutellum darker ochraceous, the former very minutely speckled with greyish and with some larger and more distinct spots of the same colour on the anterior margin; scutellum with two obscure obconical spots on the anterior margin; face



Fig. 34.—*Mahalana fidelis*.

very pale ochraceous; body beneath and legs ochraceous; tegmina pale greyish, the claval area and the apex brownish-ochraceous spotted with greyish-white, the transverse veins brownish-ochraceous, and at the apical claval area there is a distinct suffusion of testaceous-brown; vertex of head with a distinct central longitudinal impressed line; scutellum transversely impressed behind middle; other structural characters as in generic diagnosis.

Length incl. tegm.  $6\frac{1}{2}$  millim.

*Hab.* Simla Hills.

**3588. *Mahalana lugubris*, sp. n.**

Head, pronotum and scutellum dull pale greyish brown, with scattered small, lineate, sanguineous markings; face, body beneath and legs dull ochraceous; tegmina dull fuscous-brown, in claval area an inner fascia notched inwardly, a large oblong spot at inner apical area and a few small obscure spots on disk, dull greyish-white; vertex of head with a distinct central longitudinal impressed line, the disk moderately concavely depressed; apex of scutellum shortly and acutely produced.

Length incl. tegm. 5 millim.

*Hab.* South India; Coimbatore (*Bainbrigge Fletcher*—at light). N. Bengal.

**Genus SCAPHOIDEUS. (Vol. IV, p. 371.)**

**3589. *Scaphoideus redundans*, sp. n.**

Head ochraceous; vertex with a subapical curved black linear fascia, behind which and between eyes is a broader testaceous transverse fascia; pronotum dull ochraceous, with an anterior marginal and a subbasal transverse testaceous fascia; scutellum

pale ochraceous, with a broad, transverse, basal testaceous fascia; body beneath and legs ochraceous; tegmina brownish-ochraceous spotted with greyish-white, the largest of these spots being on the claval area near middle and divided by a curved black line, a cluster of smaller spots at base, sometimes some larger ones on central costal area, a longitudinal series of about four outside claval area, and a small subapical series, some of these spots being margined with black, apical area dull ochraceous margined with black; vertex of head subtriangular, slightly conical at apex, almost as long as width between eyes, the base deeply concave; face longer than broad, in some specimens a little darkly tessellate; pronotum gibbous on basal area and declivous towards head; scutellum slightly shorter than pronotum, the extreme apex slenderly, acutely produced.

Length incl. tegm. 6-7 millim.

*Hab.* South India; Kodaikanal, and Nilgiri Hills, Lovedale (*T. V. Campbell*).

A species allied to *S. festivus*, Matsum. (vol. iv, p. 372).

### 3590. *Scaphoideus nutans*, sp. n.

Head ochraceous, vertex with a transverse testaceous fascia between eyes and two small testaceous spots on anterior margin divided by a central longitudinal line of the same colour; face with the lateral margins broadly testaceous; pronotum ochraceous, a transverse series of three or four small testaceous spots near anterior margin and two large testaceous transverse spots only narrowly divided at base (in a second specimen the pronotum is almost wholly testaceous); scutellum pale ochraceous, the basal area mottled with testaceous and with four small black marginal spots, one on each lateral margin near base and one on each side near apex; body beneath and legs ochraceous; tegmina pale brownish-ochraceous with irregular greyish-white spots, the most prominent being on inner claval margin, outside the claval area and on basal area, about posterior half of costal area with obliquely transverse black lines, apical area greyish-white narrowly margined with black; vertex of head subtriangular, apex slightly subconical, almost as long as width between eyes, deeply subangularly excavate at base; scutellum slightly shorter than pronotum, strongly transversely impressed before apex, which is slenderly, acutely produced.

Length incl. tegm. 5 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

### 3591. *Scaphoideus hieroglyphicus*, sp. n.

Head dull ochraceous, vertex with two apical transverse lines between which the colour is pale ochraceous, face with some obscure transverse black lines; pronotum ochraceous, thickly mottled with fuscous-brown, the central anterior margin and lateral areas pale ochraceous, on the latter an oblique dark spot which

is centrally pale ochraceous; scutellum dull ochraceous, the lateral and apical margins narrowly black, the former containing a small pale spot; body beneath brownish-ochraceous with greyish suffusions; legs ochraceous, posterior tibiae blackish, subapically annulated with greyish-white, the tarsi (excluding base) black; tegmina brownish-ochraceous with longitudinal black lines, a subapical greyish-white space containing black spots, the apex black narrowly margined with brownish; vertex of head slightly broader between eyes than long, the base somewhat roundly excavate; scutellum about as long as pronotum, transversely impressed before apex, which is slenderly and acutely produced.

Length incl. tegm. 5 millim.

*Hab.* South India; Nandidrug (*T. V. Campbell*).

**3592. *Scaphoideus brachycephalus*, sp. n.**

Head pale ochraceous, vertex with some minute apical marginal dark spots and a somewhat broken testaceous transverse fascia between eyes; face with the lateral margins with short transverse lines of pale fuscous; pronotum greyish-white, three testaceous spots at anterior margin, the basal and lateral areas distinctly darker; scutellum pale ochraceous, with a dark spot near each basal angle; body beneath and legs imperfectly seen in carded specimen, but the spinules to the posterior tibiae apparently black; tegmina greyish-white, veins and prominent mottlings fuscous-brown, the inner claval marginal area with numerous transverse lines of that colour, and about apical half of costal area similarly marked; vertex of head between eyes a little broader than long; scutellum a little shorter than pronotum, transversely impressed before apex, which is slenderly and acutely produced.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

In appearance closely allied to *S. elegantulus*, Melich. (vol. iv, p. 375), but with the vertex of head broader and shorter and less excavate at base; the transverse fasciate dark lines to inner claval marginal area, and paler tegmina are also distinctive.

**3593. *Scaphoideus pallifrons*, sp. n.**

Head pale greyish-white, vertex with two small central testaceous spots, the lateral margins of face closely marked with transverse testaceous lines; clypeus and a spot on each side of it ochraceous; pronotum dull greyish-white, three small spots near anterior margin and a broad basal fascia centrally broken, pale brownish; scutellum pale greyish-white, a large brownish spot at each basal angle, and a small linear black spot on each lateral margin of apex; tegmina brownish, very much mottled with greyish-white, of which the largest spots are found at the middle of costal area, in clavus and on basal area, on all these pale interspaces there are a few minute brownish spots; body beneath more

or less brownish; legs ochraceous, bases of anterior femora, spots to intermediate and posterior tibiae, and tarsi (more or less) black; vertex of head not longer than breadth between eyes, anterior margin angulate, posterior margin angulately emarginate; scutellum a little shorter than pronotum, transversely impressed before apex, which is slenderly and acutely produced.

Length incl. tegm. 5 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

**3594. *Scaphoideus assamensis*, sp. n.**

Head pale ochraceous, vertex with a minute spot at apex and about six semi-connected vertical short lines between eyes, black; pronotum brownish-ochraceous, its anterior margin black; scutellum pale ochraceous, with a large black spot at each basal angle; body beneath and legs pale ochraceous, sternum and abdomen with black markings; tibiae and tarsi spotted with black; tegmina chocolate-brown, costal area widening from base pale ochraceous, with dark transversely oblique markings; vertex of head as long as or slightly longer than breadth between eyes, its apex conically acute; face much longer than broad; pronotum with three moderate central carinations, the medial one straight, the other two oblique; scutellum about as long as pronotum, strongly transversely impressed before apex, which is acutely produced.

Length incl. tegm. 6 millim.

*Hab.* Assam.

**3595. *Scaphoideus stigmaticus*, sp. n.**

Vertex of head brown with longitudinal black lines, its apex ochraceous with a small dark spot at extreme tip, face dull ochraceous; pronotum fuscous-brown, with three central paler carinate lines; scutellum fuscous-brown, three central paler carinate lines and a large dark spot at each basal angle; body beneath and legs ochraceous, tibiae and tarsi spotted with black; tegmina with the claval area fuscous-brown, remaining area paler and more ochraceous, the veins fuscous-brown, and with a large elongate, costal, violaceous-blue spot, some smaller pale greyish spots on the apical area, the apex itself pale purplish with darker margins; vertex of head as long as or slightly longer than width between eyes, its posterior margin concave; face considerably longer than broad; pronotum about as long as scutellum, the latter transversely impressed before apex, which is slender and acutely produced.

Length incl. tegm. 6 millim.

*Hab.* E. Himalayas.

Genus **HUSSA**, nov.

Type, *H. insignis*, Dist.

*Distribution.* South India.

Vertex of head about as long as breadth between eyes, which are large and oblique; face longer than broad, the lateral margins concavely sinuate, not gradually narrowing to apex; pronotum about as long as scutellum, its anterior margin convex between the eyes; scutellum transversely impressed and with apex acute as in *Scaphoideus*; tegmina about four times as long as broad.

*Hussa* is allied to *Scaphoideus*, but differs principally in the different structure of the face.

3596. **Hussa insignis**, sp. n.

Head, pronotum and scutellum pale ochraceous; small anterior marginal spots to vertex and a larger marginal spot a little before each eye, black; two discal linear sanguineous fasciæ traversing vertex, pronotum and scutellum; lateral areas of pronotum and scutellum shining fuscous-brown; face ochraceous with transverse fuscous-brown fasciæ, the anterior marginal fascia broken by two

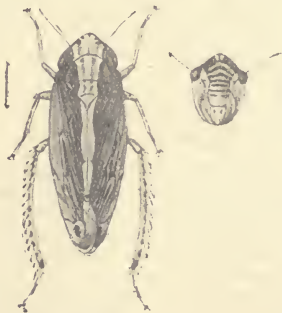


Fig. 35.—*Hussa insignis*.

central, small, ochraceous spots; body beneath and legs pale ochraceous, abdominal segmental margins sanguineous; intermediate and posterior tibiæ spotted with black; tegmina very pale ochraceous—excluding the larger part of the claval area with the veins fuscous-brown, some oblique lines of that colour on lower costal area, the extreme apical area greyish-brown with a dark central spot; structural characters as in generic diagnosis.

Length incl. tegm.  $6\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

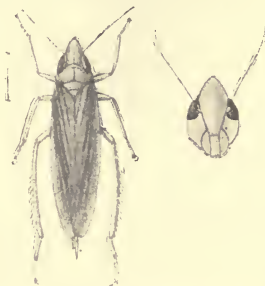


Genus **CAMPBELLINELLA**, nov.Type, *C. illustrata*, Dist.*Distribution.* South India.

Vertex of head considerably longer than width between eyes, the apex subacutely produced, the lateral margins carinate and also a faint longitudinal central carina; face longer than broad; eyes obliquely elongate, extending over the lateral angles of the pronotum, which is about as long as the scutellum, centrally longitudinally carinate, the posterior margin moderately sinuate; scutellum subtriangular, transversely impressed near middle; tegmina more than four times as long as broad, three apical and two elongate subapical cells.

3597. *Campbellinella illustrata*, sp. n.

Body above and beneath pale ochraceous; tegmina more greyish, with the veins darker and in some places subfasciate; tarsal claws black; eyes black; posterior tibiae longly spinulose; other structural characters as in generic diagnosis.

Fig. 36.—*Campbellinella illustrata*.

Length incl. tegm. 6–7 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*); Coimbatore (*Pusa Coll.*).

*Var.* In some specimens there are indications of a dark spot at the basal angles of the scutellum.

Genus **VIRIDOMARUS**, nov.Type, *V. capitatus*, Dist.*Distribution.* South India.

Vertex of head nearly twice as long as breadth between eyes, elongately subtriangular, narrowed to apex which is broadly subacute; eyes moderately long and oblique, stretching over the anterior lateral angles of the pronotum; face imperfectly seen in carded specimens; pronotum about twice as broad as long,

transversely impressed before middle; scutellum shorter than pronotum, subtriangular, transversely impressed; tegmina about two and a half times as long as broad, in ♀ covering only three-fourths of the abdomen, four apical and two subapical cells; posterior tibiae finely, somewhat shortly spinulose.

3598. *Viridomarus capitatus*, sp. n.

Head, pronotum and scutellum ochraceous, extreme apex of vertex of head black; eyes pale castaneous; body beneath (imperfectly seen in carded specimen) much suffused with black; femora (excluding apices) black or blackish; tibiae and tarsi ochraceous, apices of posterior tibiae and the posterior tarsi more or less black; tegmina very pale virescent; other characters as in generic diagnosis.



Fig. 37.—*Viridomarus capitatus*.

Length  $4\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **BITUITUS**, nov.

Type, *B. projectus*, Dist.

*Distribution.* South India.

Head long and slender, twice as long as breadth between eyes, laterally moderately emarginate, gradually narrowing to about half its length and then more slenderly produced; eyes long and oblique, posteriorly projecting over the lateral angles of the pronotum; face long and narrow, widened on posterior half; pronotum almost as long as broad at base, the anterior margin convex, the lateral margins inwardly oblique from about half their length towards scutellum, the disk longitudinally ridged, the base almost truncate, very slightly concave; scutellum shorter than pronotum, subtriangular, transversely ridged near middle; tegmina about four times as long as broad, three apical cells and two slender subapical cells; posterior tibiae finely and somewhat shortly spinulose.

3599. *Bituitus projectus*, sp. n.

Vertex of head ochraceous; face fuscous-brown, with a narrow, central, longitudinal ochraceous fascia; pronotum pale virescent, the anterior and lateral marginal areas more or less ochraceous; scutellum pale ochraceous; body beneath (imperfectly seen in carded specimen) more or less blackish; tegmina virescent, the apical area more pale ochraceous; femora (excluding apices) black, tibiae and tarsi dull ochraceous, posterior tarsi darker, the posterior

Fig. 38.—*Bituitus projectus*.

tibiae inwardly margined with black; structural characters as in generic diagnosis.

Length 6 millim.

*Hab.* South India; Nandidrug (*T. V. Campbell*).

Genus **PATERNUS**, nov.

Type, *P. pusanus*, Dist.

*Distribution.* Behar.

Vertex of head a little longer than breadth between eyes, gradually narrowing to apex, which is subacute; face about twice as long as broad, narrowed anteriorly and posteriorly, the lateral margins rounded; eyes long and obliquely projecting over the lateral pronotal angles; pronotum more than twice as broad as long, the anterior margin truncate between the eyes and then concavely oblique to lateral margins, which are short, the disk with two longitudinal sulcations; scutellum about as long as pronotum, subtriangular, transversely impressed before apex; tegmina about three times as long as broad, three apical cells and a long slender subapical cell; posterior tibiae closely, rather longly spinulose.

3600. *Paternus pusanus*, sp. n.

Head, pronotum and scutellum dull grey; face with short, oblique, dark striations on anterior half of each lateral area;

scutellum with an obscure dark spot near each basal angle; body beneath and legs more or less ochraceous; tegmina pale purplish-brown, broad costal and apical areas hyaline; structural characters as in generic diagnosis.



Fig. 39.—*Paternus pusanus*.

Length incl. tegm. 4 millim.

*Hab.* Behar; Pusa.

Genus **VOLUSENUS**, nov.

Type, *V. lahorensis*, Dist.

*Distribution.* North India.

Vertex of head longer than width between eyes, triangularly, subacutely produced; face narrow, twice as long as broad, moderately attenuated anteriorly and posteriorly, the lateral margins a little rounded; eyes long and oblique, continued along the lateral pronotal margins; pronotum about twice as broad as long, posterior and anterior margins almost truncate, the lateral margins oblique behind eyes, centrally longitudinally ridged; scutellum much broader at base than long, about or nearly as long as pronotum; tegmina about three times as long as broad, four apical cells and one moderately long ante-apical cell; posterior tibiae longly, finely spinulose.

3601. **Volusenus lahorensis**, sp. n.

Pale stramineous; body beneath and legs more ochraceous, tegmina paler and slightly very pale virescent; vertex of head with a slight discal longitudinal elevation, the lateral margins of which are darker in hue; pronotum transversely striate and slightly minutely granulate, with a central longitudinal carina; scutellum with a slight transverse ridge near middle and two

small callosities near anterior margin, posterior area very finely granulate; other characters as in generic diagnosis.

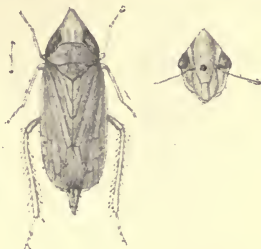


Fig. 40.—*Volusenus lahorensis*.

Length incl. tegm. 4 millim.

*Hab.* Punjab.

#### Genus **ZIZYPHOIDES**, nov.

Type, *Z. indicus*, Dist.

*Distribution.* Calcutta.

Vertex of head about as long as pronotum, triangularly produced, the lateral margins almost in a line with the outer margins of eyes, centrally longitudinally sulcate for about half its length from base; face long and narrow, about twice as long as greatest width, strongly emarginate at insertions of antennæ, the lateral margins then convexly narrowing to clypeus, which is longer than broad; pronotum about twice as broad at base as its greatest length, anterior margin strongly convexly angulate, basal margin somewhat concavely truncate; scutellum much broader at base than long, subtriangular; tegmina about four times as long as broad, apical cells distinct and shown in figure of type; posterior tibiæ longly, strongly spinulose.

#### 3602. *Zizyphoides indicus*, sp. n.

Vertex of head pale ochraceous, eyes castaneous; pronotum with a pale olivaceous tint, the anterior marginal area pale ochraceous; scutellum pale ochraceous, the lateral basal angles and a basal, central subquadrate spot not extending beyond the transverse incision, pale olivaceous; body beneath and legs pale ochraceous; tegmina dull greyish-white, with three small dark spots, two on inner claval margin and one near claval apex; vertex of head distinctly, rather broadly, centrally longitudinally sulcate for about half its length from base; pronotum with a series of

small foveations near anterior margin; anterior and intermediate tibiæ darkly finely maculate.



Fig. 41.—*Zizyphoides indicus*.

Length incl. tegm. 7 millim.

*Hab.* Calcutta; on *Zizyphus jubata*.

3603. *Zizyphoides fraternus*, sp. n.

Vertex of head, pronotum and scutellum pale ochraceous; face and legs pale testaceous; (abdomen beneath imperfectly seen in carded specimen); tegmina pale virescent, costal margin more ochraceous; vertex of head angularly produced, about as long as pronotum, distinctly foveate on each side near eyes; face strongly emarginate at insertions of antennæ, the lateral margins then concavely narrowed to clypeus; pronotum with two central, longitudinal robust ridges; scutellum broader at base than long; posterior tarsi spotted with black.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **NANDIDRUG**, nov.

Type, *N. speciosum*, Dist.

*Distribution.* South India.

Vertex of head a little longer than width between eyes, beyond which it is longly and subacutely produced, the eyes elongate and obliquely directed over the lateral angles of the pronotum; face nearly twice as long as greatest breadth, convex, narrowed towards clypeus; pronotum about twice as broad as long, the anterior margin moderately convex, posterior margin truncate; scutellum small, about half the length of pronotum, subtriangular, the apex acute; tegmina about three and a half times as long as broad, three apical and three elongate subapical cells; posterior tibiæ finely spinulose.



3604. *Nandidrug speciosum*, sp. n.

Head, pronotum and scutellum ochraceous; vertex of head with two longitudinal fasciæ, pronotum with three and scutellum with a single central longitudinal fascia, sanguineous; body beneath and legs ochraceous; tegmina pale dull ochraceous, the veins

Fig. 42.—*Nandidrug speciosum*.

distinct and paler in hue and between them in many places the colour is distinctly darker, the costal and apical areas paler, the latter narrowly margined with black; structural characters as in generic diagnosis.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* South India; Nandidrug (*T. V. Campbell*).

3605. *Nandidrug viridicans*, sp. n.

Head ochraceous, face piceous or ochraceous with the lateral margins piceous; pronotum and scutellum ochraceous or pale greenish, sometimes the vertex also pale greenish; body beneath with black suffusions (imperfectly seen in carded specimens), legs ochraceous; tegmina dark virescent, the costal and apical areas ochraceous, the veins prominent; lateral margins of vertex a little acuminate and recurved; pronotum very finely granulose; other structural characters as in generic diagnosis.

Length incl. tegm.  $4-4\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Genus **ALLECTUS**, nov.

Type, *A. notatus*, Dist.

*Distribution.* Nilgiri Hills.

Vertex of head about one and a half times as long as breadth between eyes, longly and conically produced in front of eyes, almost as long as pronotum and scutellum together; face imperfectly seen in carded unique type; eyes large and robust, posteriorly directed along the anterior lateral angular margins of the

pronotum; pronotum about or almost twice as broad at base as long, the anterior margin convex, basal margin truncate; scutellum small, subtriangular; tegmina more than three times as long as broad, with irregularly shaped apical cells, which will be better understood by an examination of the figure of the type of the genus here published; posterior tibiæ longly, strongly spinulose.

3606. *Allectus notatus*, sp. n.

Vertex of head, pronotum and scutellum stramineous, vertex with two prominent black spots on anterior margin, which are connected beneath on upper margin of face; legs stramineous, posterior tibiæ inwardly, linearly, blackish; tegmina bronzy-green,



Fig. 43.—*Allectus notatus*.

the veins darker, the apical margins more palely bronzy; apices of the tarsi blackish, the basal joint of the posterior tarsi also blackish; structural characters as in generic diagnosis.

Length incl. tegm. 4 millim.

*Hab.* Nilgiri Hills; Ootacamund, Dodabetta Hill (*T. V. Campbell*).

Genus **CRISPINA**, nov.

Type, *C. nigristigma*, Dist.

*Distribution.* South India.

Vertex of head little more than half as long as breadth between eyes, the anterior margin somewhat broadly convex; face considerably longer than broad, narrowing towards clypeus; pronotum longer than either vertex or scutellum, the anterior margin

convexly rounded, the lateral margins slightly rounded, posterior margin subtruncate; scutellum subtriangular, much wider at base than long; tegmina more than four times as long as broad, four apical cells; tibiæ finely spinulose, the posterior tibiæ more strongly and densely spinulose.

3607. *Crispina nigristigma*, sp. n.

Head, pronotum and scutellum very pale ochraceous, head with a small marginal black spot in front of eyes, and two large black spots near base of pronotum; body beneath and legs more or less

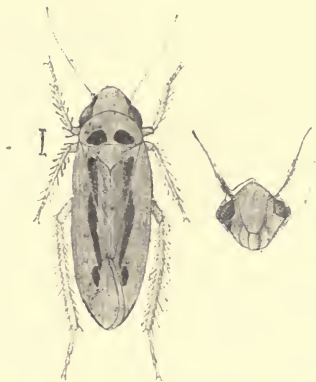


Fig. 44.—*Crispina nigristigma*.

pale ochraceous; tegmina pale greyish, the claval area pale slaty-blue, on each side of which is a more or less broken black longitudinal fascia terminating in a more or less detached spot; face with distinct oblique striations; other structural characters as in generic diagnosis.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Genus **ACONURA**. (Vol. IV, p. 378.)

3608. *Aconura atrata*, sp. n.

Head, pronotum and scutellum black; eyes, a sub-obsolete central longitudinal line to vertex, three minute spots on anterior margin of pronotum and a small central spot on anterior margin of scutellum, dull greyish; face with oblique dull greyish striæ on each lateral area; body beneath and legs black, abdominal margins dull greyish; tegmina shining purplish-black, the veins prominent;

costal margin (narrowly) and extreme apical area brownish-ochraceous; vertex long, about twice as long as breadth between eyes, distinctly longer than pronotum, apex obtusely angulate; eyes large, oblique; extreme apices of femora brownish-ochraceous.

Length incl. tegm. 5 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Genus **GALERIUS**, nov.

Type, *G. indicatrix*, Dist.

*Distribution.* South India.

Vertex of head about as long as breadth between eyes, the anterior margin conically subangularly produced; eyes of moderate size, obliquely directed backwardly; face much longer than broad, gradually narrowing towards clypeus; pronotum twice as broad as long, the anterior margin convex, the posterior margin moderately concave, lateral margins behind eyes straight; scutellum broader at base than long, subtriangular, the lateral margins straightly oblique, transversely impressed near middle; tegmina more than four times as long as broad, apical cells long and narrow, ante-apical very long and distinct; tibiæ spinulose, posterior tibiæ more strongly and densely spinulose.

3609. *Galerius indicatrix*, sp. n.

Head, pronotum, scutellum, body beneath and legs very pale stramineous; vertex of head with a narrow black apical margin

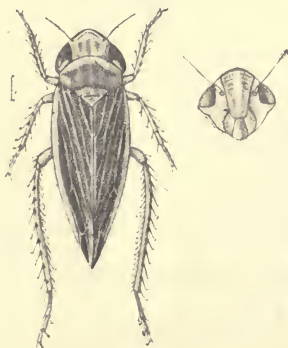


Fig. 45.—*Galerius indicatrix*.

preceded by a more indistinct dark submarginal line; eyes black; face with the lateral striations on the upper half distinct and darkly defined; pronotum with four obscure dark longitudinal

fasciæ which do not extend to the anterior margin, while the area on which they appear is more obscurely fuscous; scutellum with some small pale spots at base; tegmina fuscous, the veins and costal area very pale stramineous or greyish, the subcostal area more or less longitudinally suffused with dark fuscous markings; tibiæ more or less outwardly spotted with fuscous, the posterior tibiæ more distinctly maculate; structural characters as in generic diagnosis.

Length incl. tegm. 4 millim.

*Hab.* South India; Kodaikanal, Chikkaballapura, and Nilgiri Hills (*T. V. Campbell*).

In some varietal specimens of this species the dark markings on the tegmina are much less pronounced, and the black apical and subapical lines on the vertex of the head practically obsolete.

3610. *Galerius aberrans*, sp. n.

Head, pronotum, scutellum, body beneath and legs ochraceous; eyes black; tegmina pale virescent; vertex of head about as long as breadth between eyes, the anterior margin conically, subangularly produced, centrally longitudinally carinate; pronotum with the anterior margin ridged, the ridge only extending to about middle of eyes and not to lateral margins; scutellum broader at base than long; tegmina not reaching apex of abdominal process; face much longer than broad, gradually narrowing towards clypeus; extreme apex of posterior tibiæ and spots to posterior tarsi black or fuscous.

Length incl. tegm. and abdom. process 4 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

In this species the posterior margin of the pronotum is almost straightly truncate.

Genus **MAXIMIANUS**, nov.

Type, *M. notatus*, Dist.

*Distribution.* South India.

Vertex of head considerably longer than breadth between eyes, conically, subacutely narrowed to apex; eyes large and oblique; face much longer than broad, lateral margins moderately sinuate and slightly narrowed to clypeus; pronotum nearly twice as broad as long, behind eyes the lateral margins oblique, posterior margin truncate, anterior margin strongly convex; scutellum much shorter than pronotum, subtriangular, finely transversely impressed near middle; tegmina less than four times as long as broad, three apical cells, the uppermost semicircular; posterior tibiæ longly, thickly spinulose.

3611. *Maximianus notatus*, sp. n.

Vertex of head and face ochraceous, the latter with the lateral areas distinctly darkly striate; pronotum and scutellum stramineous,

the former with a dark transverse spot behind eyes and some obscure markings near anterior margin; scutellum with obscure darker markings as seen under microscope and in figure; body beneath and legs ochraceous; tegmina greyish-white, a little darker



Fig. 46.—*Maximianus notatus*.

at basal angles, with a distinct black spot on disk at about midway from base to apex, and sometimes with a very small and more obscure spot nearer apex; structural characters as in generic diagnosis.

Length incl. tegm. 3 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

3612. *Maximianus cephalicus*, sp. n.

Vertex of head pale ochraceous, two oblique linear fuscous spots at apex, and four rather paler spots on disk, two just before eyes and two between eyes at base; pronotum with transverse linear pale fuscous markings, one central near anterior margin and two also near anterior margin on each side, just behind eyes; face ochraceous, with close castaneous transverse striæ, a central, longitudinal, subcarinate line pale ochraceous; (abdomen beneath imperfectly seen in carded type); legs ochraceous; tegmina dull greyish-white; vertex of head considerably longer than breadth between eyes, conically subacutely narrowed to apex, lateral margins in front of eyes somewhat ridged, with a central, fine, longitudinal incision, the apex moderately upturned; pronotum with a broken, subanterior, curved fuscous linear fascia, terminating near apices of eyes; tegmina with a minute, darker spot in claval area; femora more or less longitudinally streaked with black.

Length incl. tegm. 3 millim.

*Hab.* Nilgiri Hills (*T. V. Campbell*).



Genus **DELTOCEPHALUS**. (Vol. IV, p. 380.)

**DELTOCEPHALUS DORSALIS**. (Vol. IV, p. 380.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

**DELTOCEPHALUS INFIRMUS**. (Vol. IV, p. 386.)

Add: *Hab.* Bengal; Calcutta and Purneah. South India; Coromandel (*Ind. Mus.*). Kumaon; Almora (*C. Paiva*).

3613. ***Deltocephalus nigrifacialis***, sp. n.

Vertex of head, pronotum and scutellum pale dull ochraceous; vertex with two large pale brownish-ochraceous spots between eyes, and a pale greyish narrow apical marginal fascia containing two central dark spots; pronotum with four obscure longitudinal brownish fasciæ; scutellum with a brownish spot at each basal angle and a similar spot at apex; face black, with two small spots at inner margins of eyes, a central longitudinal linear spot on posterior area and some oblique striations pale ochraceous, cheeks



Fig. 47.—*Deltocephalus nigrifacialis*.

and clypeus black with ochraceous linear markings; abdomen beneath blackish, legs ochraceous, posterior tibiæ finely spotted with pale black; tegmina pale brownish-ochraceous with darker spots, those before the apical area distinctly darker, apical area greyish, with the margins of the spots only brownish-ochraceous; vertex of head about as long as breadth between eyes; face scarcely longer than breadth between eyes, moderately convex.

Length incl. tegm.  $3\frac{1}{2}$  millim.

*Hab.* East Himalayas; Darjiling (*C. Paiva*).

*Var.* In one specimen the face is entirely black.

**3614. *Deltocephalus darjilingensis*, sp. n.**

Vertex of head pale stramineous, two anterior marginal black lines enclosing a submarginal narrow stramineous area not connected at extreme apex, a dark ochraceous transverse fascia between anterior margins of eyes more or less connected with basal margin by two longitudinal lines of the same colour, a central black longitudinal line not reaching apex; eyes slaty-brown; pronotum dark obscure ochraceous, with three discal pale longitudinal lines; scutellum pale ochraceous, with some small, central, transverse black spots; face ochraceous, much transversely shaded with black; clypeus with three central dark longitudinal lines; body beneath black; legs ochraceous, posterior tibiæ prominently spotted with black; tegmina pale bronzy-brown, costal area pale ochraceous with longitudinal bronzy-brown spots, the veins also paler in hue; tegmina not quite reaching abdominal apex; face scarcely longer than breadth between eyes; vertex a little shorter than breadth between eyes; apices of the tegmina convexly rounded.

Length incl. tegm. 4 millim.

*Hab.* E. Himalayas; Darjiling Distr.

**3615. *Deltocephalus coloratus*, sp. n.**

Head ochraceous, vertex with a sublateral sanguineous fascia on each side, eyes black; face with the apical lateral margins black, clypeus ochraceous with two central linear black spots, the cheeks mostly greyish-white; pronotum ochraceous, with a central longitudinal line and a curved longitudinal fascia on each side, black; scutellum blackish; body beneath black, the legs ochraceous; tegmina bronzy-brown, the costal margin broadly pale ochraceous more or less inwardly margined with black, the veins pale ochraceous; vertex of head subconically produced; face finely transversely striate and with a distinct central longitudinal raised line on about its posterior half; pronotum very finely and somewhat indistinctly granulose.

Length incl. tegm. 4 millim.

*Hab.* Manipur, Ukhrul (*Rev. W. Pettigrew*).

**3616. *Deltocephalus campbelli*, sp. n.**

Vertex of head ochraceous, anterior margin with a series of small black spots; face ochraceous, the lateral areas with oblique dark striations; pronotum greyish-ochraceous, the anterior area obscurely tuberculate; scutellum ochraceous; body beneath and legs more or less ochraceous, all the tibiæ and tarsi finely spotted with black; tegmina pale ochraceous, the venation greyish, a small grey spot on each side of claval suture near base, middle and at apex, two spots on disk and two on costal margin of apical area greyish-white; vertex of head about as long as breadth between

eyes and with a central dark longitudinal incised line on posterior area; scutellum transversely incised beyond middle.

Length incl. tegm.  $3\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Allied to *D. distinctus*, Motsch. (vol. iv, p. 382).

**3617. *Deltocephalus butleri*, sp. n.**

Allied to the previous species *D. campbelli* but larger, the extreme apical margin of the vertical apex entirely black; tegmina pale ochraceous with the venation greyish, but without the greyish-white spots and with a distinct and prominent black spot on disk before the apical area; the vertex of head is also broader and a little shorter in length than breadth between eyes; other characters as in *D. campbelli*.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

**3618. *Deltocephalus capitatus*, sp. n.**

Head, pronotum and scutellum ochraceous, vertex with two black spots near apex, and face with two lateral black spots near middle; body beneath and legs ochraceous; tegmina bronzy-brown, the costal area—broadening apically—dull greyish-white; vertex of head about as long as or slightly longer than breadth between eyes, and before eyes obtusely subangularly produced; face a little longer than breadth between eyes, centrally longitudinally ridged; posterior tibiae finely spinulose.

Length incl. tegm.  $2\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal and Nilgiri Hills (*T. V. Campbell*).

In a varietal form of this species from Kodaikanal, the two black spots near the apex of the vertex are fused, and the two spots on the central lateral areas of the face are smaller and more inconspicuous.

**3619. *Deltocephalus trimaculatus*, sp. n.**

Vertex of head and pronotum very pale virescent, vertex with three prominent black spots in angulate series; face pale ochraceous, with a central longitudinal ridge even paler in hue; scutellum pale ochraceous; body beneath pale virescent, legs pale ochraceous; tegmina pale dull greyish, the venation distinctly darker; vertex about or almost as long as breadth between eyes, somewhat angularly produced; face prominently longitudinally ridged, the lateral areas finely transversely striate; pronotum a little longer than scutellum.

Length incl. tegm. 5 millim.

*Hab.* Calcutta.

**3620. *Deltocephalus fusco-varius*, sp. n.**

Head, pronotum and scutellum dull pale ochraceous, vertex with two castaneous spots in a line with anterior margin of eyes;

pronotum with a prominent black spot behind each eye, and with a transversely curved obscure darker fascia a little broken at centre, where it approaches the anterior margin; face with the lateral areas finely, obscurely, darkly striate; body beneath and legs ochraceous; tegmina dull greyish-white with small black spots, of which the most conspicuous are three in claval area and three on costal margin of apical area, the claval and apical areas a little paler in coloration, the latter with the cellular areas paler and almost appearing as white spots; vertex of head a little shorter than breadth between eyes, with a slender central longitudinal ridge; face convex; tibiæ finely spinulose.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* Ceylon; Trincomali (*Bainbrigge Fletcher*).

Genus **POSTUMUS**, nov.

Type, *P. facialis*, Dist.

*Distribution.* South India.

Head between eyes considerably broader than long, obtusely angularly produced from eyes to apex; face longer than broad, slightly narrowing to apex; pronotum very broad, more than twice as broad as long, anterior margin nearly straight, posterior margin slightly concave, lateral margins roundly oblique; scutellum about twice as broad at base as long, its apex subacute; tegmina more than three times as long as broad, three subapical cells; posterior tibiæ strongly spinulose.

3621. *Postumus facialis*, sp. n.

Vertex of head dull greyish, a prominent black spot at apex, two large circular bluish-grey spots, each anteriorly containing a



Fig. 48.—*Postumus facialis*.

small black spot, at base between eyes; face pale ochraceous, with an anterior marginal black spot and a transverse series of fused

black spots between eyes; pronotum dull greyish, with an anterior submarginal transverse series of black linear spots; scutellum black; tegmina dull greyish, two obscure darker transverse fasciæ near middle and a number of small black spots on apical area; body beneath and legs more or less ochraceous; posterior tibiæ spotted with black; structural characters as in generic diagnosis.

Length incl. tegm. 3 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

### Genus **OROSIUS**, nov.

Type, *O. albicinctus*, Dist.

*Distribution.* South India.

Vertex of head about as long as breadth between eyes, anteriorly subconically produced; face longer than broad, the lateral margins moderately convex, gradually moderately narrowed towards clypeus; scutellum more than half as long as broad, anterior margin strongly convex, posterior margin truncate, the lateral margins oblique; scutellum about twice as broad at base as long, apically subacute, centrally transversely impressed near middle; tegmina about four times as long as broad, their apices broadly rounded, a network of cells on apical area (shown better in figure than by description); posterior tibiæ strongly spinulose.

#### 3622. *Orosius albicinctus*, sp. n.

Head and pronotum ochraceous with irregular blackish mottlings, of which the more distinct are two small spots near apex of vertex

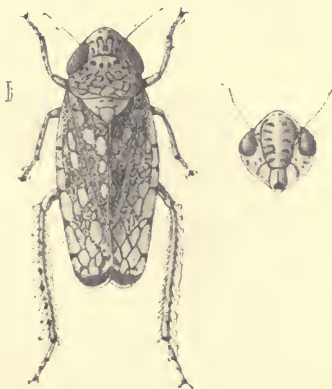


Fig. 49.—*Orosius albicinctus*.

and two at inner margin of each eye, on pronotum an irregular transverse series of small spots near anterior margin; face pale

ochraceous, the lateral area with transverse dark striations; scutellum pale ochraceous, with two small central black spots near base; (body beneath imperfectly seen in carded type); legs pale ochraceous more or less spotted with black; tegmina brownish ochraceous mottled with prominent greyish-white spots, the costal area paler with blackish macular markings, apical area paler with dark apical margin and the venation also blackish; structural characters as in generic diagnosis.

Length incl. tegm. 3 millim.

*Hab.* South India; Kodaikanal and Chikkabaliapura (*T. V. Campbell*).

Genus **LEOFA**, nov.

Type, *L. mysorensis*, Dist.

*Distribution.* South India.

Vertex of head about as long as breadth between eyes, the anterior margin subconically or subangularly produced; face broad, but distinctly longer than broad; pronotum about as long as vertex of head, considerably longer than scutellum, which is more or less triangular; tegmina abbreviated, about reaching middle of abdomen, their posterior margins rounded.

Allied to *Chiasmus* (vol. iv, p. 391) by the long vertex of head and posteriorly rounded margins of tegmina, but differing from that genus by the long pronotum, the different structure of the face, and the ♀ not being macropterous as described by Melichar in his description of his Ceylonese species.

3623. *Leofa mysorensis*, sp. n.

♀. Head, pronotum and scutellum ochraceous; pronotum



Fig. 50.—*Leofa mysorensis*.

posteriorly darkly suffused; scutellum with a darker spot at each basal angle, and a central, blackish, posteriorly angulated linear



spot; body beneath and legs ochraceous; face with oblique black striations on each lateral area; tegmina dull ochraceous, two small black spots in oblique sequence in each claval area, and some minute black linear apical marginal markings; beyond the apices of the tegmina the exposed abdomen is shining black with obscure paler spots for about half its length, the remaining apical area ochraceous with the segmental margins testaceous; posterior tibiae spotted with black; vertex of head moderately concavely flattened.

Length incl. ovipositor 4 millim.

*Hab.* South India; Mysore State (*T. V. Campbell*).

3624. *Leofa affinis*, sp. n.

♂ & ♀. Allied to the previous species but smaller, the vertex of head more robust, more concave posteriorly; the scutellum more sinuate at the lateral margins; face narrower.



Fig. 51.—*Leofa affinis*.

Length, ♂ 3 millim., ♀ incl. ovipositor 4 millim.

*Hab.* South India; Nandidrug and Chikkaballapura (*T. V. Campbell*).

3625. *Leofa sanguinalis*, sp. n.

♀. Head, pronotum, scutellum and face testaceous; clypeus black; legs ochraceous; abdomen beneath (as can be seen in carded specimens) black on basal, testaceous on apical areas; tegmina ochraceous, with a small dark spot just outside claval area; abdomen above beyond the abbreviated tegmina black on basal, testaceous on apical areas; vertex of head about as long as breadth between eyes, conically, subangularly produced anteriorly, faintly but broadly centrally, longitudinally carinate; pronotum and sometimes scutellum with a central longitudinal dark fascia; face almost completely blackly striate, the striations not confined to the lateral areas.

Length incl. ovipositor  $3\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

3626. *Leofa unicolor*, sp. n.

♀. Entirely palely, somewhat sordidly ochraceous; the abdomen above usually with dark transverse fasciæ to the segmental margins; vertex of head anteriorly conically subangulate; eyes black, in one specimen testaceous; face with slight transverse dark striæ on each lateral area; two small dark testaceous spots at base of clypeus; body beneath and legs concolorous; abdomen above with a series of small dark spots on lateral margins.

Length incl. ovipositor  $3\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

3627. *Leofa pedestris*, sp. n.

♀. Vertex of head pale ochraceous, lateral and apical margins more or less black, eyes black; pronotum ochraceous, with obscure central black spots on disk; sternum and legs obscurely ochraceous, bases of anterior and intermediate femora, linear streaks on posterior femora and tibiæ, and apices of tarsi, black; abdomen beneath almost entirely black; tegmina dull greyish; abdomen above beyond the abbreviated tegmina fuscous-brown with small ochraceous spots, the apex more or less ochraceous, with central and lateral black markings; vertex of head obtusely produced anteriorly; face transversely darkly striate and with a fine central longitudinal impression.

Length incl. ovipositor  $3\frac{1}{2}$  millim.

*Hab.* South India; Nilgiri Hills (*T. V. Campbell*).

Genus **GUNHILDA**, nov.

Type, *G. noctua*, Dist.

*Distribution.* Nilgiri Hills.

♂. Vertex of head only a little more in length than half the breadth between eyes, the lateral margins truncate before eyes and then broadly rounded; face slightly longer than broad, convex, moderately centrally carinate; pronotum about as long as vertex of head, moderately convex between eyes, the posterior margin truncate; scutellum small, considerably shorter than pronotum; tegmina short, only extending a little over base of abdomen, their apical margins rounded; tibiæ spinulose, the posterior tibiæ more strongly and densely spinulose.

3628. *Gunhilda noctua*, sp. n.

Black, somewhat shining; vertex of head with the anterior margin ochraceous; face dull ochraceous, lateral areas with dark striations, cheeks black; femora black, their apices and the tibiæ and tarsi dark ochraceous; vertex of head (excluding anterior margin) thickly finely punctate and with a central longitudinal carination; pronotum and scutellum closely transversely striate;

tegmina thickly, coarsely punctate; other structural characters as in generic diagnosis.



Fig. 52.—*Gunhilda noctua*.

Length 3 millim.

*Hab.* Nilgiri Hills (*T. V. Campbell*).

Subfamily TYPHLOCYBINÆ. (Vol. IV, p. 399.)

Genus **BOLANUS**, nov.

Type, *B. bæticus*, Dist.

*Distribution.* North Assam.

Vertex of head broadly conically produced, about as long as breadth between eyes; face about twice as long as greatest breadth, very strongly concavely sinuate before the inner margins of eyes; pronotum about twice as broad as long, and about as long as vertex of head, the anterior margin convex, posterior margin truncate; scutellum broader at base than long, subtriangular; antennæ long and slender; tegmina more than three times as long as broad, moderately amplified posteriorly, posterior half of costal area obliquely transversely veined, two large inner apical cells.

3629. *Bolanus bæticus*, sp. n.

Vertex of head and pronotum dull greyish; vertex with a narrow anterior margin and a broken transverse fascia between the anterior margins of eyes, black; face pale ochraceous, a large anterior spot and a smaller spot near base of each antenna, black; sternum and legs pale ochraceous (abdomen mutilated); scutellum pale ochraceous, its apex darker, preceded by a transverse greyish

line, the basal area with some small dark spots; tegmina tawny-grey, a large greyish-white spot in claval area crossed by two oblique dark lines, a similar spot outside claval area, and the apical half of costal area crossed by three dark oblique veins, the inner



Fig. 53.—*Bolanus beticus*.

apical cells pale purplish, a small black spot near apex; posterior tibiæ strongly spinulose, their apices black; other structural characters as in generic diagnosis.

Length incl. tegm. 5 millim.

*Hab.* Northern Assam.

#### Genus **BOLANUSOIDES**, nov.

Type, *B. heros*, Dist.

*Distribution.* North India.

Vertex of head subacutely produced before eyes, about as long as breadth between eyes; face much longer than broad, strongly narrowed from near insertion of antennæ; pronotum moderately convex, about as long as vertex, nearly twice as broad as long, its anterior margin obtusely angularly convex, posterior margin truncate; scutellum broader than long, subtriangular; tegmina about four times as long as broad, the claval area large and long, two apical cells, the innermost small and ill-defined; posterior tibiæ thickly strongly spinulose.

#### 3630. *Bolanusoides heros*, sp. n.

Vertex of head, pronotum and scutellum more or less reddish ochraceous; anterior margin of vertex stramineous, with narrow, linear black margins; eyes black; face black, the anterior area stramineous; pronotum with a large dark central spot or suffusion;

scutellum with a large dark spot at each basal angle; body beneath and legs ochraceous; tegmina blackish, with transverse



Fig. 54.—*Bolanusoides heros*.

darker linear markings, the basal and apical areas paler and more ochraceous; other structural characters as in generic diagnosis.

Length incl. tegm. 4 millim.

*Hab.* N.W. India; Kumaon.

Genus **EMPOASCA**. (Vol. IV, p. 401.)

**EMPOASCA FLAVESCENS**. (Vol. IV, p. 405.)

Add: *Hab.* United Provinces; Cawnpur. Bengal; Pusa.

The specimens received from Cawnpur are labelled "from Pigeon Pea (*Cajanus indicus*)—not known to be injurious (*Lefroy*)"; those from Pusa are recorded as "on Castor."

### 3631. *Empoasca thea*.

*Empoasca thea*, *Dist.*, "Entomologist," xliii, p. 196 (1910).

Bright pale olivaceous green; eyes black; tegmina either with the apical area greyish-white, or greyish-white with the basal area and costal margin green; body beneath and legs pale olivaceous green; vertex of head rounded, more than twice as broad as long; scutellum strongly transversely impressed before apex; tegmina considerably passing abdominal apex, with a distinct elongate discal cell before the apical cells.

Length incl. tegm. 4 millim.

*Hab.* Cachar (*Antram*). Calcutta.

Mr. Charles B. Antram sent me this species, found as a very destructive pest to tea-gardens in company with *E. flavescens*, Fabr. I have also received a single specimen from Calcutta.

**3632. *Empoasca terminalis*, sp. n.**

Bright olivaceous green; tegmina more flavescent, and when folded the apical area distinctly pale bronzy-brown, the costal margins darker olivaceous green; legs also darker olivaceous green; eyes piceous; vertex of head slightly conical anteriorly, more than half as long as breadth between eyes; posterior area of pronotum and the scutellum moderately gibbous, the latter with two discal longitudinal ridges; tegmina passing the abdominal apex in both sexes.

Length incl. tegm.  $3-3\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

**3633. *Empoasca rubronotata*, sp. n.**

Head, pronotum, scutellum, body beneath and legs very pale ochraceous; tegmina very pale stramineous, with two elongate sanguineous spots situate one near middle of each claval area; vertex of head almost as long as breadth between eyes, conically produced anteriorly; scutellum strongly transversely impressed; tegmina far exceeding abdominal apex; eyes black or blackish.

Length incl. tegm.  $3\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

**3634. *Empoasca fuscofasciata*, sp. n.**

Vertex and pronotum dull ochraceous, vertex with a central black spot at apex; scutellum dull greyish-white, with a prominent black spot near each basal angle; body beneath and legs more or less ochraceous; eyes black; tegmina dull greyish, with two broad longitudinal fuscous fasciæ, apically united and situate near costal and inner margins; vertex of head about half as long as breadth between eyes; scutellum transversely impressed before apex; tegmina far exceeding abdominal apex.

Length incl. tegm. 4 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

**3635. *Empoasca atropurpurea*, sp. n.**

Head, pronotum and scutellum pale ochraceous; eyes, two spots at base of pronotum, and a spot at each basal angle of scutellum, black or blackish; lateral margins of the face narrowly fuscous-brown; body beneath and legs pale ochraceous; tegmina pale purplish brown, the apical area paler and greyish-white, the costal margin bronzy-ochraceous, a blackish longitudinal fascia continued from the basal angular spots of scutellum through claval area, and a narrower longitudinal fascia of the same colour outside claval area; vertex of head a little more than half as long as breadth between eyes; scutellum strongly transversely impressed; tegmina extending considerably beyond the abdominal apex.

Length incl. tegm.  $3\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).



**3636. *Empoasca nigroscutellata*, sp. n.**

Head, pronotum and scutellum pale ochraceous; eyes and a prominent spot at apex of scutellum, black; body beneath and legs pale ochraceous; tegmina creamy-white, the inner margins more or less slightly infuscate; vertex of head rounded, not more than half as long as breadth between eyes; scutellum strongly transversely impressed; tegmina extending far beyond abdominal apex.

Length incl. tegm. 4 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

**3637. *Empoasca devastans*, sp. n.**

Head, pronotum and scutellum pale ochraceous; vertex with two black spots on apical margin; face with the lateral areas more or less distinctly pale brownish; body beneath pale ochraceous; legs and tegmina pale greenish-ochraceous, the latter with a black spot near apex of each claval area; vertex of head short, conically rounded anteriorly, more than half as long as breadth between eyes; pronotum with three greyish-white spots near anterior margin; scutellum spotted with greyish-white; tegmina extending far beyond abdominal apex.

Length incl. tegm. 3 millim.

*Hab.* Nagpur (*H. Lefroy*).

A serious pest to newly introduced varieties of cotton and to any weak cotton plants (*Lefroy*).

**3638. *Empoasca nagpurensis*, sp. n.**

Head and pronotum pale ochraceous, the scutellum more darkly ochraceous; eyes black; face with the lateral areas pale brownish; legs and sternum ochraceous; abdomen blackish; tegmina greyish-white, more or less shaded with very pale brownish, especially on basal, costal and apical areas; vertex of head broadly rounded anteriorly, about half as long as breadth between eyes; tegmina extending far beyond abdominal apex.

Length incl. tegm. 3 millim.

*Hab.* Nagpur (*H. Lefroy*).

"On wheat; not known to be a pest" (*Lefroy*).

**3639. *Empoasca radha*, sp. n.**

Head and scutellum pale ochraceous, pronotum dark ochraceous; eyes, a spot at apex of vertex, and a spot at each basal angle of the scutellum, black; tegmina fuscous, darker on costal area; body beneath and legs pale ochraceous; vertex of head rounded anteriorly, a little more than half as long as breadth between eyes; tegmina far exceeding the abdominal apex.

Length incl. tegm. 4 millim.

*Hab.* Nilgiri Hills (*T. V. Campbell*).

Genus **EMPOASCANARA**, nov.Type, *E. prima*, Dist.*Distribution.* South India.

Vertex of head in length more than half the breadth between eyes, subconically produced anteriorly; face elongate, prominently obliquely narrowed to clypeus, its greatest breadth between eyes more than half its length; pronotum longer than either vertex of head or scutellum, anterior margin moderately convex between eyes, posterior margin truncate; scutellum subtriangular; tegmina more than three times as long as broad, three long apical cells and a somewhat large and prominent subbasal costal cell; posterior tibiæ with long, dense spinules.

3640. *Empoascanara prima*, sp. n.

Head, pronotum and scutellum dull pale ochraceous; vertex of head with the central apical margin and a subapical curved fascia dull testaceous; pronotum with a sinuate, subbasal, testaceous,

Fig. 55.—*Empoascanara prima*.

transverse fascia; scutellum with two obscure, linear, pale testaceous, transverse fasciæ, one at base, the other near middle; clypeus black; body beneath and legs pale ochraceous; abdomen above slaty-blue; tegmina creamy-white, more or less (especially on claval area) reflecting the bluish abdomen beneath; structural characters as in generic diagnosis, the scutellum strongly transversely impressed near middle.

Length incl. tegm.  $2\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T' V. Campbell*).

3641. *Empoascanara binotata*, sp. n.

Head, pronotum, scutellum, body beneath and legs pale greyish-ochraceous; a minute black spot at apex of head, and two prominent black spots at base of scutellum; abdomen above

darker ochraceous with some still darker shadings; tegmina greyish-white, the costal margin narrowly and very slightly darker and more ochraceous; vertex of head in length more than half the breadth between eyes, subconically produced anteriorly.

Length incl. tegm. 3 millim.

*Hab.* Calcutta (*N. Ammandale*).

Genus **PAIVANANA**, nov.

Type, *P. indra*, Dist.

*Distribution.* Bengal.

Vertex of head a little longer than breadth between eyes, which are large and prominent, the anterior margin subangulate, with a faint central impressed longitudinal line; pronotum about half as long as greatest breadth, a little rounded between eyes, posterior margin truncate before scutellum and then obliquely straight to lateral margins; scutellum subtriangular, considerably shorter than pronotum; face not quite twice as long as greatest breadth; tegmina nearly four times as long as broad, not extending much beyond the abdominal apex.

**PAIVANANA INDRA.**

*Typhlocyba indra*, *Dist.* (vol. iv, p. 415).

I originally included this species in the genus *Typhlocyba*,



Fig. 56.—*Paivanana indra*.

though I see now that I ought to have separated it generically, which I have here done and figured the typical species.

3642. *Paivanana durga*, sp. n.

Vertex of head ochraceous, the apical area more or less castaneous; eyes black; face pale brownish, a small linear black spot on each side near middle; cheeks pale ochraceous; pronotum dull castaneous, the margins ochraceous; scutellum ochraceous; sternum beneath and legs more or less ochraceous; abdomen beneath largely black; a linear black spot on each side of clypeus; tegmina dull steely-blue, a sublateral darker fascia and the costal margin dull greyish; tarsi more or less blackish; vertex of head a little longer than breadth between eyes; face finely, obscurely, transversely striate.

Length incl. tegm. 3 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Genus **EUPTERYX**. (Vol. IV, p. 416.)3643. *Eupteryx sanguinolenta*, sp. n.

Head, pronotum and scutellum pale greyish-white, vertex with a linear spot at apex and a transverse fascia between eyes, sanguineous; pronotum with the anterior margin very narrowly and the posterior and lateral margins more broadly sanguineous; scutellum with the basal margin broadly sanguineous; face, body beneath and legs pale ochraceous; tegmina sulphur-yellow, claval



Fig. 57.—*Eupteryx sanguinolenta*.

area with two angulate spots near base, a broad irregular fascia commencing on costal margin at about one-third from base, connected across and irregularly extending along claval area, sanguineous, and containing a small pale spot; apical area pale brownish, its inner margin dark fuscous; vertex broader at base than long, the anterior margin conically rounded, a little centrally longitudinally carinate.

Length incl. tegm.  $2\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

3644. *Eupteryx paivana*, sp. n.

Vertex and face pale ochraceous; pronotum, scutellum and basal margin of face castaneous-brown; legs pale greyish-white, apices of the posterior tarsi black; tegmina brownish-ochraceous, basal half of costal area blue, followed by a shining sanguineous costal spot, apical area with a large outer and inner hyaline spot, the outermost marked with brown lines; vertex much broader between eyes than long.

Length incl. tegm. 4 millim.

*Hab.* E. Himalayas, Darjiling (*C. Paiva*).

Genus **CAMULUS**, nov.

Type, *C. ornatus*, Dist.

*Distribution.* N. India and Java.

Vertex of head about as long as pronotum, subacutely narrowed from eyes to apex; face longer than broad, narrowing towards clypeus, the anterior margins from eyes subacute; pronotum about as long as scutellum, the anterior margin slightly convex, the posterior margin almost straight, lateral margins very slightly oblique; scutellum about as long as pronotum, triangular, distinctly transversely impressed near middle; tegmina more than three times as long as broad, four terminal cells, the claval area largely developed.

This genus apparently includes the *Typhlocyba gillavryi*, Melich., from Java (Notes from the Leyden Museum, xxxvi, p. 144, pl. iii, fig. 17, 1914).

3645. *Camulus ornatus*, sp. n.

Head, pronotum and scutellum testaceous; anterior margin of vertex silvery-white, which is defined anteriorly and posteriorly by

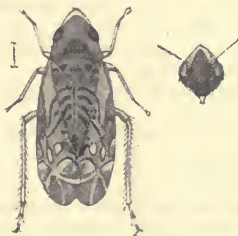


Fig. 58.—*Camulus ornatus*.

narrow black lines; pronotum with a central black suffusion and before posterior margin a transverse black line; scutellum with a transverse series of four black spots, of which the two central spots are almost fused, beneath these a smaller black spot on each lateral margin; face black, the margins before eyes pale ochraceous; body beneath and legs pale ochraceous, the abdomen spotted with

black; tegmina pale ochraceous with more or less obliquely transverse black lines, a large pale bluish central costal spot crossed by a transverse black line, apical area obscure greyish, with the veins bright ochraceous, and with a small black spot before apex.

Length incl. tegm. 4 millim.

*Hab.* E. Himalayas; Kurseong, Kumaon.

3646. *Camulus bellulus*, sp. n.

Head and pronotum ivory-white; pronotum with a central longitudinal brownish spot which narrowly continues anteriorly towards each eye, an oblique linear black spot on each side near basal angles; face discally dark fuscous-brown, but indistinctly seen in the carded typical specimen; scutellum pale stramineous, with a brownish spot at each basal angle; body beneath and legs apparently pale ochraceous (indistinctly seen); tegmina pale greyish-white, outer claval margin with a prominent longitudinal testaceous fascia, two small black spots on each claval area, and a small anterior black spot and a longer submedian black spot on costal area, the apical venation fuscous and stramineous; vertex subacutely narrowed from base to apex; scutellum strongly transversely impressed near middle; pronotum a little longer than scutellum.

Length incl. tegm. 4 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

3647. *Camulus modestus*, sp. n.

Vertex of head, pronotum and scutellum dull ochraceous, scutellum with a somewhat darker spot in each basal angle; face ochraceous, from anterior margins of eyes to clypeus more testaceous; body beneath and legs pale ochraceous; tegmina very pale ochraceous, with transversely oblique fasciæ which are more intensely ochraceous and have darker margins; vertex of head about as long as pronotum, somewhat conically narrowed anteriorly, very strongly transversely impressed near middle.

Length incl. tegm. 4 millim.

*Hab.* United Provinces; Kumaon, Almora (*C. Paiva*).

Genus **AUGULUS**, nov.

Type, *A. typicus*, Dist.

*Distribution.* Assam.

Vertex about as long as breadth between eyes, subconically rounded anteriorly, eyes of only moderate size; face very long and convex, about three times as long as broad, slightly narrowing posteriorly; pronotum somewhat convex, with an obscure central longitudinal ridge, at greatest breadth twice as broad as long, the lateral margins moderately rounded; anterior and posterior margins subtruncate; scutellum nearly twice as broad at base as long, subtriangular, transversely impressed near middle; tegmina about three times as long as broad, two well-defined apical cells; posterior tibiæ thickly strongly spinulose.



3648. *Augulus typicus*, sp. n.

Vertex of head, pronotum and scutellum dark castaneous-brown, anterior margin of vertex very narrowly ochraceous; scutellum with a transverse series of small pale spots at base, and a pale marginal spot on each side behind the transverse incision; face, body beneath and legs ochraceous; tegmina dark castaneous-brown,

Fig. 59.—*Augulus typicus*.

small greyish-white spots scattered on basal and apical areas, a large excavated greyish-white spot on each side of claval suture behind middle and the apical margin also greyish-white, and a large angulated stramineous subapical costal spot; vertex with a somewhat obscure central longitudinal ridge; other structural characters as in generic diagnosis.

Length incl. tegm. 5 millim.

*Hab.* Assam; Margherita (*Doherty*).

Genus **TYPHLOCYBA**. (Vol. IV, p. 409.)

3649. *Typhlocyba gemmata*, sp. n.

Head, pronotum and scutellum bright ochraceous; eyes and a somewhat large rounded spot at each basal angle of the scutellum, black; sternum and legs pale ochraceous; abdomen beneath black or blackish; tegmina pale shining greyish-white with very pale bluish reflections, the apical area with very pale brownish suffusions; vertex of head rounded, barely half the length of breadth between eyes, two minute dark spots before apex; face elongate, slightly convex; scutellum transversely impressed near middle; tegmina longly extending beyond abdominal apex.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal, Nilgiri Hills (*T. V. Campbell*). Allied to *T. orbata*, Melich. (vol. iv, p. 409).

**3650. *Typhlocyba ornatula*, sp. n.**

Head, pronotum and scutellum pale ochraceous; eyes and two spots near apical margin of vertex and a large spot at each basal angle of scutellum, black; face with a central longitudinal black linear fascia, clypeus black; legs pale ochraceous; abdomen beneath imperfectly seen in carded specimens; tegmina with about basal halves pale bluish, with two oblique brownish fasciae, situate one in claval area, the other nearer costal margin, apical halves pale brownish; vertex of head rounded anteriorly, barely half as long as breadth between eyes; face elongate, moderately flattened; scutellum depressed towards middle, where it is transversely impressed; tegmina extending far beyond abdominal apex.

Length incl. tegm. 5 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

**3651. *Typhlocyba diana*, sp. n.**

Vertex of head pale ochraceous, with two central somewhat oblique black spots connected posteriorly; pronotum fuscous-brown, the anterior and lateral areas pale ochraceous, the lateral areas with three black spots, one behind eyes, the other two near middle in transverse series, the anterior pale area crossed by two oblique black spots near the inner margins of eyes; scutellum imperfectly seen in pinned typical specimen, but with a black spot at each basal angle; face pale ochraceous, with a sub-anterior marginal series of four small black spots and with two similar spots near apex; sternum and legs pale ochraceous; tegmina creamy-white with much broken longitudinal brown fasciae, the costal margin narrowly of that colour; vertex of head about, or nearly, twice as broad between eyes as long, the anterior margin convexly rounded; tegmina extending far beyond abdominal apex, which is black.

Length incl. tegm. 4 millim.

*Hab.* E. Himalayas; Darjiling.

**3652. *Typhlocyba atrosignata*, sp. n.**

Head, pronotum and scutellum pale ochraceous; eyes and a large rounded spot at each basal angle of scutellum black; sternum and legs pale ochraceous; abdomen beneath blackish; tegmina greyish-white, the subbasal costal cell fuscous-brown; vertex subconically rounded anteriorly, in length barely half the width between eyes; face elongate, moderately flattened; scutellum obliquely depressed from base to near middle, where it is transversely incised; tegmina extending far beyond abdominal apex.

Length incl. tegm.  $4\frac{1}{2}$ –5 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Allied to *T. funeta*, Melich. (vol. iv, p. 411).

**3653. *Typhlocyba guttulata*, sp. n.**

Head, pronotum and scutellum testaceous; eyes and a rounded spot in each basal angle of scutellum black; legs pale testaceous; abdomen black; tegmina pale fuliginous, the claval area testaceous, the subbasal costal cell slaty-grey; vertex of head subconically rounded anteriorly, about half as long as breadth between eyes; face narrowed towards clypeus, its apical half suffused with fuscous; scutellum obliquely depressed from base towards middle, where it is transversely incised; tegmina extending far beyond abdominal apex.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* Nilgiri Hills; Lovedale (*T. V. Campbell*).

**3654. *Typhlocyba coerulescens*, sp. n.**

Head, pronotum and scutellum pale ochraceous; eyes and a rounded spot in each basal angle of scutellum black; abdomen bluish-black, its base pale ochraceous; legs pale ochraceous, apices of the tarsi black; tegmina creamy-white; base of costal margin, narrow apical margin, a subcostal streak before middle, and a faint central subapical streak, pale fuscous-brown; vertex of head scarcely half as long as breadth between eyes; face elongate, very slightly convex; scutellum obliquely depressed from base to about middle, where it is transversely incised; tegmina far exceeding abdominal apex.

Length incl. tegm. 5 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

**3655. *Typhlocyba sanguinalis*, sp. n.**

Head, pronotum and scutellum very pale stramineous; eyes black; body beneath and legs dull creamy-white; tegmina greyish-white, a longitudinal sanguineous fascia on each tegmen commencing at lateral margins of scutellum, extending through claval area to about half the length of tegmen and very strongly narrowly compressed near its middle; vertex of head a little more in length than half the breadth between eyes; face elongate, moderately convex; scutellum somewhat depressed, transversely impressed near middle; tegmina extending far beyond abdominal apex.

Length incl. tegm. 4 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

**3656. *Typhlocyba cardinalis*, sp. n.**

Head and pronotum pale stramineous, base of pronotum sanguineous; scutellum very pale stramineous; eyes and a spot at each basal angle of scutellum black; body beneath and legs stramineous; tegmina pale creamy-white, a sanguineous fascia occupying claval area for about half its length from base, followed by a similar fascia outside claval area extending to the apical area, which is inwardly slightly infusate; vertex of head about half as

long as breadth between eyes; scutellum obliquely depressed from base, and transversely incised before apex; tegmina extending far beyond abdominal apex.

Length incl. tegm. 4 millim.

*Hab.* Nilgiri Hills; Lovedale (*T. V. Campbell*).

**3657. *Typhlocyba atrifrons*, sp. n.**

Vertex of head, pronotum and scutellum dull pale yellowish, pronotum with darker suffusions, its anterior margin pale, a small obscure blackish spot on each lateral area; vertex with two rounded black spots on anterior margin; scutellum with a triangular black spot in each basal angle and a small black spot at apex; face and clypeus with a broad, central, longitudinal black fascia, commencing between eyes; body beneath and legs pale ochraceous, prosternum with an oblique black spot on each side of anterior coxæ; abdomen beneath more or less shaded with black; tegmina dull greyish-white, with obscure pale ochraceous fasciæ which do not reach the costal area; vertex of head very much broader than long; scutellum transversely impressed before apex.

Length incl. tegm. 4 millim.

*Hab.* Ceylon; Namunukuli (*E. E. Green*).

Allied to *T. currax* and *T. bipunctula*, Melich. (vol. iv, p. 414), from both of which the black fasciate face will at once distinguish it.

**3658. *Typhlocyba dubia*, sp. n.**

Head, pronotum and scutellum dark, bright ochraceous; vertex of head with two rounded black spots on anterior margin; eyes slaty-grey; body beneath and legs pale ochraceous; tegmina creamy-white, claval area reflecting the dark abdominal dorsum beneath; vertex rounded in front, short, in length not more than half the breadth between eyes; face elongate, moderately convex; tegmina passing the abdominal apex.

Length incl. tegm. 3 millim.

*Hab.* Nagpur (*Pusa Coll.*).

On wheat; not known to be a pest (*H. M. Lefroy*).

**3659. *Typhlocyba rubrostriata*, sp. n.**

Head, pronotum and scutellum pale ochraceous; eyes fuscous-brown; body beneath and legs pale ochraceous; tegmina creamy-white, the claval area with numerous dull sanguineous, longitudinal, linear fasciæ, and a similar fascia just outside the claval area, beyond claval apex directed to outer margin of apical area a broken fuscous oblique fascia; vertex of head broad and short, more than twice as broad as long; pronotum with three very obscure longitudinal darker fasciæ, the central one straight and linear; scutellum transversely incised nearer base than apex; tegmina extending far beyond abdominal apex.

Length incl. tegm. 4 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

3660. *Typhlocyba rufuscula*, sp. n.

Head, pronotum and scutellum dull creamy-white; body beneath and legs dull pale ochraceous; eyes pale fuscous; tegmina dull creamy-white, with numerous longitudinal, somewhat broad, sanguineous fasciæ not only in claval area but beyond it, the last and outer fascia in apical area, which has a fuscous streak; vertex of head short and broad, about half as long as breadth between eyes; pronotum with some obscure, darker, fasciate suffusions; scutellum transversely impressed near middle; tegmina passing far beyond the abdominal apex.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* Calcutta.

Allied to the preceding species, *T. rubrostriata*.

3661. *Typhlocyba spectra*, sp. n.

Head, pronotum, scutellum, body beneath and legs very pale ochraceous; tegmina creamy-white, the apical areas very pale, obscure ochraceous; eyes black; vertex of head a little more than half the breadth between eyes; face elongate, somewhat flattened; scutellum transversely impressed near middle; tegmina extending far beyond abdominal apex.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

3662. *Typhlocyba opulenta*, sp. n.

Head, pronotum, scutellum, body beneath and legs dull stramineous or very pale ochraceous; tegmina pale shining stramineous,



Fig. 60.—*Typhlocyba opulenta*.

the apical area a little more ochraceous; vertex of head about half as long as the breadth between eyes, subconically produced anteriorly; scutellum distinctly transversely impressed near middle; eyes and apices of the tarsi infuscated.



Length incl. tegm. 5 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

3663. *Typhlocyba straminea*, sp. n.

Head, pronotum, body beneath and legs ochraceous; scutellum stramineous; tegmina pale stramineous, the apical area paler and more colourless; vertex of head subconically rounded anteriorly, about twice as broad between eyes as long.

Length incl. tegm.  $3\frac{1}{2}$ –4 millim.

*Hab.* E. Himalayas; Darjiling, Kurseong,

A species allied to *T. opulenta*, Dist., but smaller, the vertex of head more conically rounded in front; face a little longer and more flattened; colour paler.

3664. *Typhlocyba delicatula*, sp. n.

Head pale ochraceous, eyes black; pronotum pale slaty-blue, the basal margin pale ochraceous; scutellum obscure pale ochraceous; body beneath and legs pale ochraceous; abdomen above shining blue with violaceous reflections; tegmina dull creamy-white; vertex of head short and broad, a little more than twice as broad as long; scutellum somewhat obscurely transversely impressed near middle; tegmina passing far beyond abdominal apex.

Length incl. tegm.  $2\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*). Calcutta (*C. A. Paiva*).

3665. *Typhlocyba?* *incerta*, sp. n.

Head, pronotum and scutellum very pale ochraceous; the latter with three prominent black spots, one near each basal angle and



Fig. 61.—*Typhlocyba?* *incerta*.

one at apex; body beneath and legs very pale ochraceous; tegmina very pale ochraceous, the claval area darker by reflecting



the ochraceous abdomen beneath, and containing a large subquadrate olivaceous spot, at apex of clavus a pale brownish spot; vertex of head about half as long as broad, somewhat angularly produced anteriorly; scutellum strongly transversely incised before apex; tegmina extending far beyond abdominal apex.

Length incl. tegm.  $4\frac{1}{2}$  millim.

*Hab.* Nilgiri Hills (*T. V. Campbell*).

I have placed this species provisionally in the genus *Typhlocyba*.

### Genus **AGURIAHANA**, nov.

Type, *A. metallica*, Dist.

*Distribution.* N.E. India.

Vertex of head centrally more than half the width at base, conically rounded anteriorly, the lateral margins almost in a line with the outer margins of eyes; face considerably longer than greatest breadth, distinctly sinuate near eyes; pronotum about half as long as broad at base, anterior margin convexly rounded, basal margin truncate; scutellum nearly twice as broad at base as long, subtriangular; tegmina more than four times as long as broad, apical cells irregular but distinct; posterior tibiae strongly spinulose.

#### 3666. *Aguriahana metallica*, sp. n.

Vertex of head dull pale ochraceous, a central line and two small discal spots dark ochraceous; pronotum dull, dark greyish, with three longitudinal obscure bluish fasciae; scutellum dull ochraceous with a black spot in each basal angle, and two central carinations not passing the transverse incision, between which the colour is somewhat darker; face, sternum and legs pale

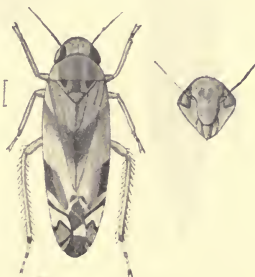


Fig. 62.—*Aguriahana metallica*.

ochraceous; abdomen beneath black, ochraceously marked at base and apex; apices of the posterior tibiae and apices and a central spot to posterior tarsi, black; tegmina vitreous, a large oblique brownish fascia crossing clavus and narrowly reaching costal

margins, a dark metallic brown fasciate spot before apical area, which is spotted and linearly marked as in figure and is better thus delineated than expressed in words; structural characters as in generic diagnosis.

Length incl. tegm. 4 millim.

*Hab.* E. Himalayas; Darjiling.

Genus **EMPOANARA**, nov.

Type, *E. militaris*, Dist.

*Distribution.* Nilgiri Hills.

Vertex of head very broad and short, about three times as broad between eyes as long, its anterior margin moderately rounded; face about twice as long as greatest breadth, roundly narrowing towards clypeus; pronotum at base twice as broad as long, its anterior margin convex, posterior margin truncate, lateral margins obliquely rounded; scutellum triangular, about half as long as broad at base, shorter than pronotum; tegmina elongate, more than five times as long as broad, apically attenuated, three apical cells; posterior tibiæ with long spinules.

3667. *Empoanara militaris*, sp. n.

Vertex of head, pronotum and scutellum sanguineous; face, sternum and legs reddish ochraceous, anterior marginal area of face sanguineous; tegmina black, narrowly sanguineous at base;

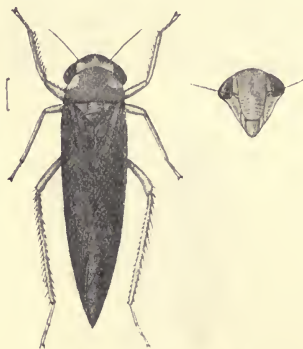


Fig. 63.—*Empoanara militaris*.

vertex of head and basal area of face centrally, longitudinally incised; scutellum transversely incised near middle; other structural characters as in generic diagnosis.

Length incl. tegm. 5 millim.

*Hab.* Nilgiri Hills; Lovedale (*T. V. Campbell*).

3668. *Empoanara sternalis*, sp. n.

Head, pronotum and scutellum dull greyish-white; vertex of head with three dull testaceous longitudinal spots (in a second specimen scarcely discernible); pronotum with a transverse series of small dull testaceous spots near anterior margin, a dark central longitudinal line, and an oblique black longitudinal spot near each basal angle; sternal segments prominently black, their margins narrowly pale ochraceous; face pale ochraceous, the clypeus and cheeks dull greyish-white; base of abdomen beneath black; tegmina greyish-white, excluding apical area, with a pale stramineous tint, small dull testaceous spots on inner claval and subapical margins, and two similar small spots on disk; vertex of head very broad and short, about three times as broad between eyes as long; face about twice as broad as long, narrowing towards clypeus.

Length incl. tegm. 4 millim.

*Hab.* E. Himalayas; Darjiling Distr., Tonglu (*C. W. Beebe*).

3669. *Empoanara lineolata*, sp. n.

Vertex of head and pronotum dull obscure brownish-olivaceous, a central black longitudinal line continued through both; vertex with two small brown spots at base situate one near each eye; pronotum with two broad longitudinal dark fasciæ on each side of the central black line; scutellum somewhat pale ochraceous; face ochraceous; legs ochraceous, much longitudinally suffused with brown; tegmina greyish-white, talc-like, the veins somewhat prominent and darker; pronotum convex; scutellum finely transversely incised near middle; abdomen beneath imperfectly seen in carded type, but apparently black, with its apex ochraceous.

Length incl. tegm. 4 millim.

*Hab.* Manipur.

Genus **CHIKKABALLAPURA**, nov.

Type, *C. maculosa*, Dist.

*Distribution.* South India.

Vertex of head in length about half the breadth between eyes, convexly rounded anteriorly, in a line with the outer margins of the eyes; face very long, a little more than twice as long as its greatest breadth; pronotum about half as long as broad at base, its anterior margin convex, posterior margin concavely sinuate; scutellum large, as long as pronotum, its apex acute, strongly transversely incised nearer base than apex; tegmina nearly four times as long as broad, the costal margin concavely sinuate at commencement of apical area, two large apical cells; posterior tibiae strongly, thickly spinulose.

3670. *Chikkaballapura maculosa*, sp. n.

Head, pronotum and scutellum pale ochraceous or stramineous, posterior area of pronotum and basal area of scutellum dark ochraceous, each being marked there with two prominent black spots; vertex of head with two prominent black spots on apical margin; face with two dark spots between eyes, and the two black apical spots on vertex a little visible on anterior margin of face,



Fig. 64.—*Chikkaballapura maculosa*.

beneath eyes the face is also finely, obliquely, a little more darkly striate; body beneath and legs pale ochraceous; tegmina pale yellowish-grey, the claval area and an oblique suffusion between middle of clavus and costal margin distinctly darker in hue, the apices of the claval area almost black; structural characters as in generic diagnosis.

Length incl. tegm. 4 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

3671. *Chikkaballapura quinquemaculata*, sp. n.

Vertex of head, pronotum and scutellum stramineous; eyes black; two black spots on vertex (one near each eye) and three similar black spots on pronotum (one near middle of anterior margin and one near each basal angle); head beneath, sternum and legs pale tawny; abdomen above and beneath bright stramineous; tegmina pale hyaline, at base reflecting the stramineous abdomen beneath; vertex of head in length about half the breadth between eyes, slightly conically rounded anteriorly; face very long, a little more than twice as long as its greatest breadth; pronotum centrally, longitudinally ridged; scutellum with its apex acute, strongly transversely incised nearer base than apex.

Length incl. tegm. 3 millim.

*Hab.* United Provinces; Kumaon.

Genus **ANOMIANA**, nov.Type, *A. longula*, Dist.*Distribution*. South India.

Vertex of head very short and broad, in length less than half the breadth between eyes, somewhat angularly rounded anteriorly; face longer than broad, narrowed to clypeus; pronotum centrally in length about half the breadth at base, somewhat angularly rounded between eyes, its base truncate, considerably longer than scutellum, which is much broader at base than long, and strongly transversely impressed near middle; tegmina very long, about five times as long as broad, three large apical cells and two subapical cells; posterior tibiae with long and dense spinules.

3672. *Anomiana longula*, sp. n.

Head pale dull ochraceous; pronotum dull greenish-ochraceous, the anterior margin paler and with four oblong darker spots; scutellum pale greenish-ochraceous, with two small dark spots on basal margin; body beneath and legs pale ochraceous; abdomen

Fig. 65.—*Anomiana longula*.

above bright bluish; tegmina dull greyish-white, at claval area reflecting the dark abdomen beneath, the apical area a little infuscate; structural characters as in generic diagnosis.

Length incl. tegm.  $3\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

## ADDENDA.

With the Jassidæ, the Appendix (commenced in 1908, vol. iv, p. 420) has been completed; but during its publication a very considerable amount of fresh material in the earlier groups has also accumulated, especially the fine collections made by Dr. T. V. Campbell in Southern India, which through the kind influence of Mr. E. A. Butler have hitherto all passed through my hands, and the types of new and examples of all the species contained therein are now deposited in the cabinets of the British Museum.

The present European war has, however, prevented and still forbids the loan of species described by Continental workers, and frequently under these conditions, as no comparisons can be made, references are only given to the original diagnoses.

## Family PENTATOMIDÆ. (Vol. I, p. 1.)

## Subfamily PLATASPIDINÆ. (Vol. I, p. 3.)

Genus **BRACHYPLATYS**. (Vol. I, p. 8.)

3673. *Brachyplatys nitidus*, *Westw.* (Plataspis) in *Hope, Cat.* p. 17 (1837); *Germ.* (Thyreocoris) *Zeitschr. Ent.* i, p. 35 (1839); *Atkins.* (Brachyplatys) *Journ. Asiat. Soc. Beng.* lv (2), p. 29 (1887).

This species has hitherto proved an enigma. Westwood's description was merely "Tota atra, nitida, tenue punctata, capite lato, scutello postice emarginato." This diagnosis was copied by both Germar and Atkinson. It is probable that Westwood did not examine the underside of his species. I have now four specimens before me from South India that seem to be that species.

Body above totally shining black; head unspotted; body beneath dull black; legs and a narrow abdominal lateral margin containing black foveation on the three basal segments, ochraceous; antennæ ochraceous, penultimate joint (excluding base) and the whole of the apical joint piceous; eyes castaneous; apex of scutellum in ♂ distinctly emarginate, in ♀ almost roundly truncate.

Length 5-6; max. breadth 5-5½ millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).



Genus **TIAROCORIS**. (Vol. I. p. 14.)3674. *Tiarocoris suffusus*, sp. n.

♀. Above ochraceous, mostly with dense, dark, fine punctures; vertex of head with a transverse line near anterior margin of each eye and four excavate, elongate spots at base, dark castaneous; pronotum with a transverse impressed line near apical margin, enclosing an ochraceous and impunctate space in which are two long waved transverse castaneous elongate spots, followed by a transverse incised castaneous line, the remaining area more or less thickly, finely, punctate and striate; scutellum ochraceous, with dense, fine, dark punctures, and a large, curved, castaneous fascia on each lateral area; head beneath, sternum and legs ochraceous, the sternum dull ochraceous; abdomen beneath dark shining castaneous, the lateral margins—broadest on basal area—ochraceous; antennæ partly mutilated, but the first, second and third joints ochraceous; head broad, the apical margin slightly centrally sinuate, the central lobe moderately prominent; femora robust.

Length 5; max. breadth  $4\frac{1}{2}$  millim.

*Hab.* Bengal; Pusa (*Bainbrigge Fletcher*).

I have not seen the male of this species.

Genus **COPTOSOMA**. (Vol. I, p. 17, and Vol. IV, p. 421.)**COPTOSOMA CONTECTUM**. (Vol. I, p. 21.)

Add: *Hab.* Lebong, 5000 feet (*H. M. Lefroy—Pusa Coll.*).  
Sikkim; Rungbong Valley (*H. Stevens*).

3675. *Coptosoma marginifrons*, sp. n.

Body above shining black; broad anterior margin of head and narrow lateral margins of pronotum ochraceous; body beneath shining black; head beneath, legs, and narrow incised lateral and apical margins of abdomen, ochraceous; the whole upper surface thickly, finely punctate, the head, however, glabrous and practically impunctate, central lobe somewhat prominent, the anterior margin broadly, conically rounded; scutellum gibbous and posteriorly strongly declivous; antennæ dull ochraceous.

Length 5; max. breadth  $4\frac{1}{2}$  millim.

*Hab.* Darjiling, Pussumbing (*H. H. Mann*)—on *Budleia*.

Allied to *C. conlectum*, Montand.

**COPTOSOMA SIGNATICOLLE**. (Vol. I, p. 25.)

Add: *Hab.* South India; Kodaikanal (*T. V. Campbell*).

**COPTOSOMA PULCHELLUM**. (Vol. I, p. 28.)

Add: *Hab.* South India; Kodaikanal and Nilgiri Hills (*T. V. Campbell*).

Three forms of this variable species were sent home by Dr. Campbell.

3676. *Coptosoma breddini*, n. n.

*Coptosoma punctatissimum*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 251 (1909), nom. præocc.\*

Head black, the lateral margins between eyes and apex and an elongate spot on disk ochraceous; antennæ ochraceous; pronotum and scutellum ochraceous, thickly mottled and punctured with castaneous-brown, pronotum with the anterior margin more ochraceous and less darkly mottled, followed by two blackish, moderately waved cicatrices, which are divided centrally by an elongate ochraceous spot connected with the anterior margin; body beneath black; legs ochraceous; lateral abdominal margins somewhat broadly ochraceous with castaneous maculations; vertex of head broad and short; lateral margins of the pronotum narrowly laminate; antennæ very robust, fourth joint a little shorter than either third or fifth.

Length  $3\frac{1}{2}$  millim.

*Hab.* Ceylon: Galgamuwa (*E. E. Green*); Maha Illupalama (*J. C. F. Fryer*).

3677. *Coptosoma ostensum*, sp. n.

Head, anterior area of pronotum and basal transverse callosity on scutellum shining smooth ochraceous, remaining pronotal area and scutellum pale ochraceous, punctured and tessellated with fuscous-brown; head with the margins of the central lobe continued obliquely to base from about middle, a waved transverse line on each lateral half of the anterior pronotal area, and two prominent central spots on the basal callosity of scutellum, fuscous-brown or piceous; pronotum with a pale, narrow, central longitudinal line (sometimes more or less continued on the scutellum) and the lateral pronotal angles impunctate, ochraceous; body beneath and legs ochraceous; sternum excluding lateral margins black, opaque; eyes black, sometimes purplish; antennæ ochraceous, the last two joints more or less infuscated; head about or almost as long as breadth between eyes, lateral lobes at apices not meeting in front of apex of central lobe.

Length 3; max. breadth 3 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*). C. India; Bhandara Distr., Bhinkbirk (United Prov. Forest Dept.).

Allied to *C. solitarium*, Montand. (vol. i, p. 35).

3678. *Coptosoma haragamensis*, sp. n.

Vertex of head pale ochraceous, eyes and apical area of central lobe castaneous, basal area enclosing the red ocelli black; pronotum ochraceous, thickly mottled and punctured with piceous, the anterior area shining, impunctate, ochraceous, with a transverse, angulated, black fascia on each lateral half, and with a submarginal dark line on each lateral area; scutellum ochraceous, thickly

\* *C. punctatissimum*, Montand. (1896).

mottled and punctured with piceous, the basal transverse callosity shining levigate ochraceous, containing three castaneous spots; sternum pale, opaque, greyish-black; legs and rostrum ochraceous; abdomen beneath ochraceous, the whole central area and narrow segmental margins black, between the latter a series of transverse testaceous lines; antennæ rather long, moderately slender, ochraceous, fourth joint a little shorter than fifth or third joints; head much broader than long, subangularly rounded anteriorly.

Length  $3\frac{1}{2}$  millim.

*Hab.* Ceylon; Haragama (*E. E. Green*).

Allied to *C. ostensum*, Dist.

### 3679. *Coptosoma campbelli*, sp. n.

Pronotum and scutellum very pale ochraceous, sparsely, irregularly but distinctly blackly punctate; head, anterior area of pronotum, and transverse callosity at base of scutellum shining, levigate, dark ochraceous; the anterior pronotal area with a transverse, strongly angulated darker cicatrice on each side, the basal callosity to scutellum with two central elongate darker spots; body beneath and legs (as can be seen in carded specimen) dark ochraceous; vertex of head a little broader between eyes than long, somewhat obliquely rounded anteriorly, the margins of central lobe distinct, moderately transversely centrally gibbous at base; the punctures on pronotum a little coarser than those on scutellum.

Length  $2\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

### 3680. *Coptosoma fuscomaculatum*, sp. n.

Head ochraceous, the margins of the central lobe and inner margins of eyes piceous; pronotum and scutellum pale ochraceous, thickly and more darkly punctate; pronotum with the lateral margins and sometimes a central longitudinal line levigate ochraceous, a piceous or black transverse line on each lateral half of the anterior area, basal disk suffused with castaneous; scutellum with three spots on anterior margin, the central spot much the largest, and more or less obscure suffusions on apical area, castaneous; body beneath black, sternum opaquely black, head beneath and legs ochraceous, lateral margins of abdomen maculately testaceous; antennæ dull ochraceous; head a little shorter than breadth between eyes, apices of the lateral lobes not extending beyond the central lobe; scutellum posteriorly strongly declivous.

Length 4; max. breadth 3 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

To be placed near *C. saniosum*, Dist. (vol. i, p. 22).

**3681. *Coptosoma liliputianum*, sp. n.**

Body above and beneath, and legs bright ochraceous; eyes bright testaceous; vertex of head about as long as breadth between eyes, central lobe elevated, anterior margin subangularly rounded; pronotum very finely punctate, strongly declivous towards head, anterior transverse cicatrices a little darker ochraceous; scutellum thickly, very finely punctate, beyond basal area strongly obliquely declivous to apex, foveate at anterior lateral angles; body beneath imperfectly seen in carded type.

Length 2 millim.

*Hab.* South India; Mysore State (*T. V. Campbell*).

*COPTOSOMA ABESUM*, *Montand. Ann. Soc. Ent. Belg.* xxxviii, p. 256 (1894).

I have not seen this species, which was described from a ♀ example in the "Mus. R. d'H. Nat. de Belgique." It is a large species  $5\frac{1}{3}$  millim. in length and  $4\frac{1}{2}$  millim. in breadth, and is described as being very near *C. pardalinum*, Stål (vol. i, p. 24).

*Hab.* W. Bengal; Barway (*P. Cardon*).

**3682. *Coptosoma variegatum*.**

*Thyreocoris variegatus*, *Herr.-Sch. Wanz. Ins.* iv, p. 83, fig. 414 (1839).

*Coptosoma variegatum*, *Montand. Ann. Mus. Civ. Gen.* xiv, p. 134 (1894); *id. Ann. Soc. Ent. Belg.* xl, p. 443 (1896).

*Coptosoma orbicula*, *Walk. Cat. Het.* i, p. 91, n. 47 (1867).

*Coptosoma blandula*, *Walk. Cat. Het.* i, p. 96, n. 61 (1867).

*Coptosoma pygmæum*, var. *accensitum*, *Montand. Ann. Soc. Ent. Belg.* xl, p. 447 (1896).

*Coptosoma siamicum*, vars. *orbicula*, *Walk.*, & *blandula*, *Walk.* (vol. i, pp. 30-31).

Body above shining black; lateral lobes of head in front of eyes, lateral margins, and four more or less transverse spots, arranged in pairs, on anterior area of pronotum, and usually a small spot at lateral angles of same, two transverse spots at base and lateral and posterior margins of scutellum, ochraceous; body beneath black, margins of head, sternum, abdomen, and the legs ochraceous.

Length  $2\frac{1}{3}$  to  $2\frac{1}{2}$ ; max. breadth  $2\frac{1}{4}$  to  $2\frac{1}{2}$  millim.

*Hab.* Ceylon; Dehra Dun (*Dr. A. D. Inms*), Sahhawala (on *Butea frondosa*). Sikkim; Rungbhong Valley, Gopaldhara (*H. Stevens*).—Tonkin. Sumatra.

Allied to *C. siamicum*, *Walk.*, from which it may be at once distinguished by the pale transverse ochraceous markings on the pronotum.

**3683. *Coptosoma fletcheri*, sp. n.**

Black; lateral lobes of head in front of eyes and the antennæ ochraceous; pronotum with two contiguous transverse linear fasciæ only centrally divided, the lateral margins and a small spot

at lateral angles pale ochraceous; scutellum with two large transverse spots at base, and the lateral and posterior margins, the last inwardly, centrally angulated, pale ochraceous; body beneath black, the sternum opaque, abdomen shining; antennæ, legs, and small abdominal marginal spots, ochraceous; body above thickly but minutely punctate, anteriorly and posteriorly declivous; antennæ moderately robust.

Length 3; max. breadth 2 millim.

*Hab.* Upper Burma; Mandalay (*T. B. Fletcher*).

COPTOSOMA NOUALHIERI. (Vol. I, p. 31.)

Add: *Hab.* N. India; Dehra Dun (bred out of *Lac* on *Butea frondosa*). Ceylon; Maha Illupalama (*J. C. F. Fryer*).

#### 3684. *Coptosoma lebongensis*, sp. n.

Body above shining black; lateral lobes of head in front of eyes, anterior margin and lateral and sublateral margins of pronotum, two moderately large rounded spots at base of scutellum, and narrow margins to same, ochraceous; body beneath black, the sternum more greyish opaque; legs and rostrum pale castaneous; abdomen shining black, the segments each with a narrow border of ochraceous spots; eyes prominently and laterally exserted, purplish-brown; body above convex, declivous towards head and apex, finely, thickly, but obscurely punctate.

Length 5; max. breadth 4 millim.

*Hab.* Sikkim; Lebong (*H. M. Lefroy*).

This species is evidently, by the character of the protuberant eyes and the markings of the scutellum, allied to *C. ophthalmicum*, Montand., but it is a much larger species and the ochraceous markings on the pronotum are different.

COPTOSOMA CARINATUM, *Kuhlg. Arch. Naturg.* 1901, pp. 225 & 245.

This species, of which the type is in the Berlin Museum, is described as being allied to *C. circumscriptum*, Germ., and *C. distigma*, Montand. The type is a ♀ specimen, and the locality given is "India orientalis, Klug."

It is well known, however, that Klug gave this habitat for some species that cannot be included in the fauna here enumerated.

The following species have been described by Breddin from Ceylon, but I have not been able to identify them with any of the species received from that island:—

COPTOSOMA SABULICOR, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 250 (1909).

Compared with *C. connectum*, Montand.

COPTOSOMA SUBEBURNEUM, *Bredd. loc. cit.* p. 252.

Compared with *C. cribarium*, Fabr.

COPTOSOMA ARCIFERUM, *Bredd. loc. cit.* p. 255.

Compared with *C. caudatum*, Montand.



## Subfamily SCUTELLERINÆ. (Vol. I, p. 38.)

## Genus SCUTELLERA. (Vol. I, p. 50.)

SCUTELLERA BREVIROSTRIS, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 258 (1909).

*Hab.* Ceylon; Kandy (*fide* Breddin).

From the description this form would appear, at least in my view, to be a small variety of *S. nobilis*, Fabr. (vol. i, p. 51), more especially as it is compared with *S. perplexa*, Westw., which I take to be a synonym of *S. nobilis*. However, in the present European situation it is quite impossible to examine Breddin's type.

## Genus CHRYSOCORIS. (Vol. I, p. 54 &amp; Vol. IV, p. 422.)

Under the name of *C. bouvieri*, Breddin (*Soc. Ent.* xix, p. 186 (1905)) has described a species for which he gives the habitat "Gebirge Süd-Indiens," and allies it to *C. simplex*, Atkins. (vol. i, p. 59), which was described from the Nilgiri Hills. It is probably a variety of that species.

## Genus HOTEA. (Vol. I, p. 65.)

HOTEA NIGRORUFA. (Vol. I, p. 66.)

Add: *Hab.* Mysore State (*T. V. Campbell*).

In specimens from the Mysore State there are examples where the ground-colour above is castaneous (as in typical examples), and varieties occur in which this ground-colour is brunneous.

## Subfamily GRAPHOSOMATINÆ.

(Vol. I, p. 70 & Vol. IV, p. 424.)

## Genus PODOPS\*. (Vol. I, p. 72 &amp; Vol. IV, p. 424.)

PODOPS OBSCURA. (Vol. I, p. 74.)

Add: *Hab.* Ceylon; Maha Illupalama (*J. C. F. Fryer*).

## Subfamily CYDNINÆ. (Vol. I, p. 81 &amp; Vol. IV, p. 426.)

## Genus LACTISTES. (Vol. I, p. 86.)

LACTISTES RASTELLUS. (Vol. I, p. 86.)

Add: *Hab.* South India; Chikkaballapura and Nandidrug (*T. V. Campbell*).

3685. *Lactistes latus*, sp. n.

Shining black, posterior area of pronotum and the corium with a more or less developed purplish tint; antennæ dull ochraceous;

\* Since these pages were in press Bergroth has described a species (*Scotinophara westwoodi* from Bombay, allied to *P. nigra*, Dall. (vol. i, p. 76). I have not seen this species (*J. Bomb. N. H. Soc.* xxiv, p. 171 (1915)).



membrane brownish-ochraceous or fuscous; coxæ pale castaneous; rostrum ochraceous with darker shadings; femora pale or very dark castaneous; tibiæ black or very dark castaneous, bases of posterior tibiæ sometimes distinctly paler; tarsi ochraceous; head shorter than its greatest breadth between eyes, moderately rugosely punctate, the central lobe prominent, lateral lobes emarginate at apices, their lateral margins rounded and moderately reflexed; pronotum with the anterior area glabrous, posterior area distinctly punctate, the lateral margins reflexed and ciliate; scutellum distinctly punctate, excepting basal margin, which is slightly raised and practically impunctate, the apex slightly depressed longitudinally in the centre; membrane passing the abdominal apex; anterior femora robust.

Length, ♂  $4\frac{1}{2}$ – $6\frac{1}{2}$ , ♀ 7–8; max. breadth, ♂  $4\frac{1}{2}$ , ♀ 4–5 millim.

*Hab.* South India; Chikkaballapura and Mysore State (*T. V. Campbell*).

Bredden (Ann. Soc. Ent. Belg. liii, p. 260, 1909) has described a species from Ceylon under the name of *Lactistes mediator*. I have hitherto not seen a specimen of this genus from Ceylon, and it may, or may not, prove to be one of the species recorded from the Indian mainland.

Genus **CYDNUS**. (Vol. I, p. 90 & Vol. IV, p. 426.)

3686. *Cydnus ater*, sp. n.

Body above shining black; extreme basal margin of the pronotum, inner claval margin and apical margin of the corium, dark castaneous; membrane greyish-white; body beneath dark castaneous; legs brownish-ochraceous; antennæ pale brownish, the apices of the joints pale stramineous, the last three joints very distinctly thickened; head above with the anterior margin narrowly pale brownish, and shortly spinulose with a few longer hairs, the base transversely striated, central lobe prominent; pronotum with the anterior marginal area transversely striated, remaining area sparsely punctate; scutellum excluding basal margin thickly finely punctate, the apex a little foveate; tibiæ spinulose, the tarsi pale stramineous.

Length  $4\frac{1}{2}$ – $4\frac{3}{4}$  millim.

*Hab.* South India; Nandidrug and Chikkaballapura (*T. V. Campbell*).

Allied to *C. nigrinus*, Fabr. (vol. i, p. 90), but a smaller and relatively broader species, pronotum less punctate basally, the scutellum more narrowed apically, &c.

**CYDNUS GERMANUS**, Bredd. Arch. Naturg. Berl. 1913, p. 96.

"In colour, shape and size very near *C. nigrinus*, but the pronotum on the posterior half and on the lateral areas without or with very indistinct punctures or rugosities; the scutellum distinctly flatter, more finely and sparsely punctured than in the

above species. Easily distinguished by the quite different form of the odoriferous apertures."

"Length  $4\frac{1}{2}$ –5 millim."

"*Hab.* Madras."

I have been unable to detect the above in any of the specimens I have received.

Genus **MACROSCYTUS** \*. (Vol. I, p. 94 & Vol. IV, p. 427.)

**MACROSCYTUS BADIUS.** (Vol. I, p. 95.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

**MACROSCYTUS EXPANSUS.** (Vol. I, p. 97.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **GEOTOMUS.** (Vol. I, p. 98 & Vol. IV, p. 427.)

3687. **Geotomus acrostictus**, sp. n.

Above and beneath shining-black; membrane pale ochraceous or dull greyish, with a large transverse black suffusion on apical half, which sometimes—as in type—has the appearance of a lunate fascia, in other specimens developing into a large apical spot; antennæ dark castaneous, the apices of the joints more or less pallescent, second joint longer than third, which is apically incrassate, fourth joint also incrassate, its base attenuate, fifth joint less but more regularly thickened, the fourth and fifth longest and subequal in length; head above anteriorly rounded and hirsute at margin, laterally with obscure striate markings, the central lobe prominent and obscurely sparingly punctate; pronotum with the anterior marginal area obscurely striate and punctate, foveate on each side behind eyes, remaining area sparingly and obscurely punctate; scutellum beyond basal area more or less obscurely transversely striate, but distinctly punctate; corium thickly, finely punctate; legs black; tarsi ochraceous.

Length  $3\frac{1}{2}$  to 4 millim.

*Hab.* South India; Chikkaballapura and Mysore State (*T. V. Campbell*).

Allied to *G. pygmaeus*, Dall. (vol. i, p. 98), but a somewhat broader species, with relative lengths of the antennæ different. Superficially this species may be recognised by the transverse black mark on the membrane.

**GEOTOMUS SUBROTUNDUS**, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 264 (1909).

This species received from Bandarawella, Ceylon, I have not been able to identify with any of my Ceylonese specimens. It is stated to be allied to *G. pygmaeus*, Dall., from which it differs by a

\* Since these pages were in press, Bergroth has described a species, *M. longirostris* from Bombay, of which he states "The length of the rostrum would place this species in the genus *Gampsotes*, Sign., but the *facies* is so different from that genus, that it is much better placed in *Macroscytus*, all other characters of which it has." (*J. Bomb. N. H. Soc.* xxiv, p. 170, 1915.)

broader round form, stronger convexity, greater polish of its deep black surface, absence of punctures from the anterior margin of the pronotum, &c. The odoriferous aperture is also figured.

GEOTOMUS BIRMANUS, *Bredd. Arch. Naturg. Berl.* 1913, p. 97.

A small species near *G. pygmaeus*, Dall., described from specimens received from Burma (Mandalay), Pegu (Palon—Mus. Hamburg).

Genus **CHILOCORIS**. (Vol. I, p. 104 & Vol. IV, p. 428.)

CHILOCORIS NITIDUS. (Vol. I, p. 105, fig. 55.)

Add: *Hab.* Ceylon (*Thwaites*). South India; Chikkaballapura (*T. V. Campbell*).

Genus **CHILOCORISTOIDES**.

Chilcoristoides, *Dist. Trans. Linn. Soc. Lond.* (2) xvi, *Zool.* p. 140 (1913).

Type, *C. felicitatis*, Dist., from the Seychelle Islands.

*Distribution.* Seychelle Islands. British India.

"General characters of *Chilocoris* (vol. i, p. 104), but differing in the structure of the scutellum, which is distinctly shorter than broad and with the lateral margins distinctly sinuate before apex, which is rounded."

CHILOCORISTOIDES ASSMUTHI.

Chilocoris ? assmuthi (vol. iv, p. 428, fig. 258).

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

CHILOCORISTOIDES SOLENOPSIDES.

Chilocoris ? solenopsides (vol. iv, p. 429).

Add: *Hab.* South India; Mysore State and Chikkaballapura (*T. V. Campbell*).

Subfamily PENTATOMINÆ.

(Vol. I, p. 109 & Vol. IV, p. 432.)

Division *HALYARIA*. (Vol. I, p. 109.)

Genus **DALPADA**. (Vol. I, p. 110 & Vol. IV, p. 433.)

DALPADA JUGATORIA. (Vol. I, p. 112.)

Add: *Hab.* Sikkim; Lebong (*H. M. Lefroy*). Kumaon.

DALPADA VERSICOLOR. (Vol. I, p. 114.)

*Dalpada deplanata*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 266 (1909).  
Var. *subdecora*, *Bredd. loc. cit.* p. 268.

Add: *Hab.* Ceylon; Kanthalay, Nalanda.

DALPADA MELANIA. (Vol. IV, p. 434.)

Add: *Hab.* Simla.

3688. *Dalpada tauriformis*, sp. n.

Head, pronotum and scutellum ochraceous, with dense, coarse, black punctures; a small spot at inner margin of each eye, narrow anterior and lateral margins and two transverse cicatrices on anterior area of pronotum, ochraceous or reddish-ochraceous; a large clear levigate spot at each anterior angle of the scutellum bright, shining ochraceous, and the apical area of the scutellum pale stramineous with sparse black punctures; corium coarsely punctate, excluding the basal and costal areas, which are distinctly suffused with ochraceous, more or less purplish-black; connexivum ochraceous, with large black spots at the segmental incisures; membrane piceous, its apical margin ochraceous; body beneath and the femora ochraceous, coarsely blackly punctate, tibiæ and tarsi ochraceous, the bases of the first and the apices of the latter more or less piceous; antennæ brownish-ochraceous, the basal areas of the joints distinctly much paler, third joint longer than second, fourth joint distinctly longest; eyes prominent and obliquely moderately elevated; pronotal basal lateral angles strong, robust, obtusely pointed, and a little upwardly produced, the lateral margins finely crenulate, a short acute spine at each anterior lateral angle, the pale pronotal cicatrices with interior black punctures.

Length 16; breadth between pronotal angles 8 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

The distinct and prominent character of this fine species is the strongly produced pronotal lateral angles. In this respect and in general appearance it is allied to *D. pilicornis*, Stål (vol. i, p. 114).

*DALPADA ARMATICEPS*, *Breidd. Ann. Soc. Ent. Belg.* liii, p. 265 (1909).

Breiddin has described this species as a Ceylonese representative of *D. clavata* (vol. i, p. 113). In vol. iv, p. 433 (1908), I recorded specimens of *D. clavata* from Ceylon, sent by Mr. E. E. Green, and the British Museum has since then received other specimens from that island collected by Mr. T. Bainbrigge Fletcher.

*DALPADA ACUTICEPS*, *Breidd. Arch. Naturg. Berl.* 1913, p. 97; *id. Ann. Soc. Ent. Belg.* liii, p. 266 (1909) (figd. not described).

Described from Burma, Bhamo (*Fea*), and stated to be allied to the preceding species *D. armaticeps*. I have already (vol. i, p. 113) recorded specimens from this locality, and sent by the same eminent collector, as *D. clavata*. I have not seen Breiddin's type and therefore can only give a reference to his description.

Genus **ERTHESINA**. (Vol. I, p. 117 & Vol. IV, p. 434.)

**ERTHESINA FULLO**. (Vol. I, p. 117.)

Add: *Hab.* South India: Chikkaballapura (*T. V. Campbell*). United Prov., Dehra Dun; Bhinkhirk District, Bhandara (on Dhak), Bankatti, Keri (under bark of Sal).

3689. *Erthesina aberrans*, sp. n.

Ochraceous, thickly and coarsely punctured with black; membrane fuscous with paler suffusions; connexivum ochraceous, thickly, somewhat finely punctate, with subquadrate black spots at the segmental incisures; body beneath ochraceous, lateral areas of the head beneath and sternum thickly, blackly, coarsely punctate, central areas of sternum and abdomen beneath finely punctate, on the latter the punctures becoming coarser on the lateral areas; antennæ black, basal joint broadly streaked with ochraceous, other joints palely ochraceous at base, first joint stoutest, not reaching apex of head, second and third joints subequal in length, fourth longest, fifth mutilated in typical specimen; head coarsely punctate, margins of the central lobe and oblique spots behind eyes black; the lateral margins spinously notched a little before the apex of the first antennal joint, thence somewhat sinuously oblique to eyes; pronotum with seven somewhat oblique longitudinal fasciæ of dark punctures, one central, two on each lateral area, and one submarginal to each lateral margin; scutellum with fasciate spots of black punctures on anterior area and two more or less distinct central fasciæ on disk; corium a little darker and browner in hue; legs ochraceous, femora spotted with black, tibiæ more or less black at bases and apices; sternum with three small black spots on each side; membrane not extending beyond the abdominal apex; anterior and posterior tibiæ more or less dilated.

Length 20; breadth between pronotal angles 9 millim.

*Hab.* North Bengal.

Allied to *E. fullo*, Thunb., but with the head distinctly shorter, antennæ more slender, apical area of scutellum considerably more slender, membrane not passing the abdominal apex, &c.

Genus **HALYS**. (Vol. I, p. 119.)**HALYS DENTATUS**. (Vol. I, p. 119.)

Add: *Hab.* United Prov., Dehra Dun (at light, *N. C. Chatterjee*); Moti Choor (under Sal bark).

Genus **NEONEVISANUS**, nov.

Type, *N. rugosus*, Dist.

*Distribution.* British India.

Allied to *Nevisanus*, from which it principally differs by the head being much shorter than the median portion of the pronotum. Body elongate; length of head and pronotum together about equal to the width of pronotum at base; structure of head generally as in *Nevisanus*; scutellum elongate, about or almost as long as head and pronotum together.



3690. *Neonevisanus rugosus*, sp. n.

Head, pronotum, scutellum and corium dark ochraceous, with dense, coarse, black punctures, pronotum and scutellum strongly rugose; membrane cupreous; connexivum ochraceous, with black spots at the segmental incisures; body beneath and legs brownish-ochraceous; sternum with coarse black punctures; head marginally black on each side of rostrum, costal areas also more or less suffused with black; abdomen beneath thickly concolorously punctate, the stigmata and marginal spots at segmental incisures black; head broad and long, much shorter than the median portion of the pronotum, truncate at apex, lobes of about equal length, lateral margins unarmed, a little concavely sinuate and upwardly recurved; antennæ with the first joint robust and about reaching apex of head, second joint slender and about twice as long as first (remainder mutilated); lateral margins of the pronotum shortly, coarsely serrate; scutellum elongate, about as long as broad at base; membrane passing the abdominal margin.

Length 17; breadth between pronotal angles  $7\frac{1}{2}$  millim.

*Hab.* United Provinces; Saharanpur; Beharigarh.

Genus *SAONTARANA*, nov.

Type, *S. burmanica*, Dist.

*Distribution.* Upper Burma.

Head considerably longer than broad, lateral margins reflexed but unarmed, the lateral lobes obliquely rounded before apex of central lobe, which distinctly projects; antennæ five-jointed, basal joint not quite reaching apex of head; pronotum between the lateral angles about twice as broad as long, the lateral margins concavely sinuate, a short spine at anterior angle, the anterior area of lateral margins shortly, obscurely crenulate, posterior lateral angles faintly subprominent; scutellum a little longer than broad at base, the apical area narrowed with its apex rounded; corium with the lateral area narrowly but distinctly concavely depressed; membrane passing abdominal apex, with numerous, robust, longitudinal veins; rostrum passing posterior coxæ; abdomen broadly centrally sulcate for nearly half its length; tibiæ moderately dilated apically.

By the unarmed lateral margins of the head allied to *Nevisanus*, Dist., from which it differs by the anteriorly prominent central lobe; the dilated anterior tibiæ is also another character, but this may prove to be a sectional one only, as in *Dalpada*.

3691. *Saontarana burmanica*, sp. n.

Head, pronotum, scutellum and corium ochraceous, with coarse black punctures, those on the lateral margins of head being confluent; antennæ black, sparingly pilose, apex of third and base of fourth joints ochraceous, third and fourth joints a



little longer and subequal in length, second and fifth joints a little shorter and also subequal in length; scutellum darker on basal disk and maculately on each side near apex; corium with some of the black punctures more or less confluent; membrane bronzy-black with paler suffusions; connexivum ochraceous, thickly, finely

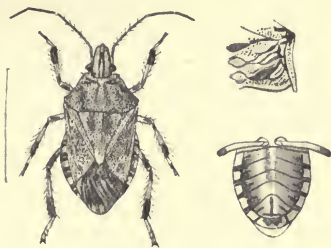


Fig. 66.—*Saontarana burmanica*.

punctate, broadly suffused with black on each side of the segmental incisures; body beneath and legs ochraceous, longitudinal streaks on head, incisures, central spots on sternum, apical joint of rostrum, suffusions on each side of connexival incisures, short lines near stigmata, a central line on apical abdominal segment, apices of femora, bases and apices of tibiae, and the tarsi—more or less—black; structural characters as in generic diagnosis.

Length 18; breadth between pronotal angles 8 millim.

*Hab.* Upper Burma; Maymyo (*T. Bainbrigge Fletcher*).

#### Genus **ASYLANA**, nov.

Type, *A. punjabensis*, Dist.

*Distribution.* North India.

Head about as long as breadth between outer margins of eyes, the lateral areas distinctly reflexed, the lateral margins angulated near eyes, apices of lateral lobes outwardly obtusely angulate, slightly concavely sinuate, not rounded as in *Asyla*; antennæ with the basal joint not quite reaching apex of head, second joint longer than the third, remainder mutilated in type; rostrum extending to the base of the second abdominal segment; scutellum considerably more than half the length of abdomen, somewhat suddenly narrowed about one-third from apex, which is broadly rounded; abdomen profoundly sulcately furrowed on the three basal segments.

This genus is allied to *Asyla* (vol. i, p. 123), from which it differs by the non-rounded apex of the head, the longer and differently shaped scutellum, &c.

3692. *Asylana punjabensis*, sp. n.

Head black, thickly punctate, with a central narrow, levigate, longitudinal, linear, ochraceous stripe; pronotum black, coarsely punctate and rugulose, the basal two-thirds paler, a central cruciform, longitudinal, narrow fascia, and a shorter and very irregular longitudinal stripe on each lateral area, levigate, ochraceous, the anterior margin also narrowly ochraceous; scutellum black, coarsely punctate and rugulose, the rugosities somewhat castaneous on apical area; abdomen above black, the connexivum marked with ochraceous near the middle of the segments; head beneath and sternum blackly punctate, base of head and lateral margins and areas of prosternum more or less ochraceous; abdomen beneath pale castaneous, blackly punctate, prominently spotted with black on the terminal segments; legs ochraceous, femora somewhat thickly blackly punctate, bases and apices of tibiæ black; corium ochraceous, thickly spotted with black; membrane bronzy-brown; structural characters as in generic diagnosis.

Length 17; breadth between pronotal angles  $9\frac{1}{2}$  millim.

*Hab.* Punjab; Simla (*N. Renouf*).

Genus **PHRICODUS**.

*Phricodus*, *Spin. Rev. Mag. Zool.* 1839, p. 331; *Stål, Hem. Afr.* i, p. 91 (1865); *id. Enum. Hem.* v, p. 49 (1876).

*Stenotoma*, *Westw. Proc. Ent. Soc. Lond.* 1844, p. cxix; *id. Trans. Ent. Soc. Lond.* iv, p. 248 (1847).

Type, *P. hystrix*, Germ.

*Distribution.* South and Central Africa, Madagascar, Mauritius, India.

Body ovate, depressed; head on each side before eyes armed with a long spine, lateral lobes longer than the central lobe and produced in long spines, the antenniferous tubercles also longly spinous; antennæ four-jointed, long, first joint short and incrassated, second long and apically incrassated, third and fourth joints distinctly thickened and fusiform; rostrum extending to posterior coxæ, first joint reaching base of head; pronotum with the lateral margin with long spines; scutellum triangular, the apical area strongly narrowed; sternum subsulcate; apical angles of the abdominal segments moderately prominent; legs with the upper surface of the tibiæ sulcate.

3693. *Phricodus hystrix*, Germ. (*Aradus*) *Silb. Rev. Ent.* v, p. 134 (1837); *Spin. (Phricodus) Rev. Mag. Zool.* 1839, p. 331, pl. 40 (1839); *Sign. Ann. Soc. Ent. Fr.* 1849, p. 327, pl. ix, fig. 3; *Dist. Bull. Ent. Res.* iv, pt. 2, Sept. (1913); *id. A. M. N. H.* (8) xii, p. 283 (1913).

*Stenotoma desjardinsii*, *Westw. Trans. Ent. Soc. Lond.* iv, p. 249, pl. 18, fig. 6 (1847).

*Phricodus fasciatus*, *Sign. Ann. Soc. Ent. Fr.* (3) viii, p. 924 (1861).

Griseous or flavescent-griseous, pilose, remotely punctate and more or less fuscously suffused, more particularly on basal area of scutellum and apical marginal areas of the corium; membrane

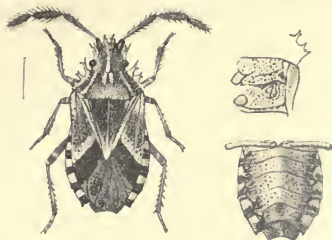


Fig. 67.—*Phricodus hystrix*.

pale greyish-brown; connexivum greyish or pale ochraceous, with large dark spots at the segmental incisures; body beneath and legs pale greyish or ochraceous, minutely sprinkled more or less with fuscous.

Length 6 to 6½ millim.

*Hab.* South India; Coimbatore.—South and Central Africa, Madagascar and Mauritius.

Mr. T. Bainbrigge Fletcher, who has sent me specimens from Coimbatore, says "It is fairly common here at light and has also been found on Gingelly plants (*Sesamum indicum*)."

#### Genus **SCIOCORIS**. (Vol. I, p. 125.)

**SCIOCORIS LATERALIS**. (Vol. I, p. 126 & Vol. IV, p. 436.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

#### 3694. **Sciocoris luteo-fasciatus**, sp. n.

Head pale castaneous-brown, thickly coarsely punctate; pronotum paler in hue, somewhat less coarsely punctate, the lateral marginal areas pale ochraceous and with a central testaceous spot in the anterior area; scutellum palely ochraceous, with dense, fine, dark punctures, a large testaceous spot or suffusion on basal area, some minute pale spots on basal margin, a central discal pale carinate line and the apex paler and almost impunctate; corium pale ochraceous, with dense, fine, dark punctures; membrane pale ochraceous or greyish, more or less speckled with black; connexivum ochraceous, with pale fuscous spots at the segmental incisures; body beneath ochraceous, two dark submarginal fasciæ; legs and rostrum stramineous; antennæ ochraceous; head a little longer than broad, apex convex, the

lateral lobes a little, but distinctly, longer than the central lobe; eyes black; pronotum with a transverse medial furrow or depression, the lateral margins moderately laminate.

Length  $4\frac{1}{2}$  to 5 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

**3695. *Sciocoris funebris*, sp. n.**

Head, pronotum, scutellum and corium fuscous-brown, with dense, fine, darker punctures; connexivum a little paler, with black spots at the segmental incisures; membrane shining fuscous-brown; body beneath dark piceous-brown; legs ochraceous, femora more or less spotted or suffused with fuscous-brown; sternum (imperfectly seen in carded specimens) with paler coxal spots; antennæ ochraceous, extreme apex of third joint, fourth joint excluding base, and the whole of fifth joint piceous or black, second joint longer than first or third, fourth longest, slightly longer than fifth; eyes pitchy-black; scutellum with a small excavate black spot in each basal angle; head distinctly longer than broad, its apex subconically rounded; pronotum with two transverse black cicatrices on disk.

Length  $4\frac{1}{2}$ –5 millim.

*Hab.* South India; Nilgiri Hills (*T. V. Campbell*).

**3696. *Sciocoris nepalensis*, sp. n.**

Ochraceous, thickly mottled and punctured with black; head with three central longitudinal narrow ochraceous stripes, of which the central one is somewhat more obscure; pronotum with the lateral margins, a central longitudinal stripe, and two oblique narrow fasciæ (the outermost more obscure) on each lateral area, ochraceous, near anterior margin blackly maculate; scutellum with a central longitudinal stripe which is broadened at apex, and a spot at each basal angle, ochraceous; corium marginally ochraceous at base; body beneath ochraceous, prominently blackly maculate; anterior area of head beneath, marginal spots to sternal segments, linear coxal markings, abdominal broad central, and narrower marginal and still narrower submarginal linear fasciæ, black; legs ochraceous, anterior femora, excluding extreme bases and apices, and spots and suffusions on the other legs, black; antennæ mutilated; connexivum ochraceous, spotted with black.

Length  $4\frac{1}{2}$  millim.

*Hab.* Nepal; Janakpur. (Found in Rice fields.)

Allied to *S. levisi*, Dist., (vol. i, p. 126) but differing in the larger and darker ochraceous markings above, the narrower and shorter head, paler and more fasciate black markings on abdomen beneath, &c.

**Genus CAYSTRUS.**

Caystrus, *Stål, Öfv. Vet.-Ak. Förh.*, 1861, p. 199; *Bergr. Mém. Ent. Belg.* xv, p. 159 (1908); *Dist. A. M. N. H.* (8) vi, p. 84 (1910).

Neodius, *Bergr.* (vol. i, p. 131).

*Caystrus*, Stål, being known to be equivalent to *Odius*, Stål = *Neodius*, Bergr., the first-mentioned generic name must now take precedence.

CAYSTRUS OBSCURUS, *Dist.* (*Neodius*). (Vol. I, p. 131.)

Add: *Hab.* North Bengal; Purneah Distr. (*C. Paiva*).

3697. *Caystrus scutellatus*, sp. n.

Dull ochraceous, with dense, coarse, black punctures; narrow anterior pronotal margin and narrow basal margin—containing three spots, one central, the other two at lateral angles—ochraceous; scutellum with two oblique spots on anterior disk and two longitudinal stripes beneath them on apical area, and a longitudinal, slightly curved stripe on corium, black or blackish; membrane black, the veins darker and the apical margin brownish-ochraceous; body beneath and legs dull ochraceous, with dense black punctures, lateral margins of sternum and abdomen, and basal areas of tibiæ pale ochraceous and impunctate; anterior lobes of head a little longer than central lobe, but not meeting before it; anterior femora with a prominent spine beneath before apex; antennæ mutilated.

Length 11; breadth between pronotal angles 6 millim.

*Hab.* Bengal; Chapra (*Mackenzie*).

Differing from *C. obscurus*, *Dist.*, by the broader apex to the scutellum, as well as by the distinct scutellar and other markings.

Genus **GULIELMUS**. (Vol. I, p. 137.)

GULIELMUS LATERARIUS. (Vol. I, p. 137.)

Add: *Hab.* Malabar; Taliparamba (*Pusa Coll.*).

"On earheads of grass."

Genus **ÆLIOMORPHA**. (Vol. I, p. 138.)

ÆLIOMORPHA LINEATICOLLIS. (Vol. I, p. 139.)

Add: *Hab.* Ceylon; Maha Illupalama (*J. C. F. Fryer*). South India; Chikkaballapura (*T. V. Campbell*). Bengal; Bihar (*Pusa Coll.*).

3698. *Æliomorpha fletcheri*, *Dist. Entomologist*, 1911, p. 22.

Body and legs pale brownish-ochraceous; head punctate, the lateral margins strongly sinuate, central lobe prominent, depressed at apex; antennæ ochraceous, the second and third joints infusate, first joint short, not reaching apex of head, second very short and subobsolete, third slightly longer than either fourth or fifth, which are subequal in length; pronotum granulose, more distinctly so on basal half, a central narrow levigate line, the lateral margins sinuate, the lateral angles subprominent and broadly subacute; scutellum more or less wrinkled and finely punctate, a



small pale levigate spot near each basal angle; corium thickly finely punctate, inner margin at apical area of scutellum narrowly blackish; membrane hyaline, distinctly passing abdominal apex; connexivum ochraceous, with large segmental brownish spots; lateral areas of sternum and abdomen beneath thickly punctate; rostrum reaching posterior coxæ, its apex black.

Length 4–4½ millim.

*Hab.* Ceylon; Hambantota (*Bainbrigge Fletcher*). South India; Coimbatore (*Pusa Coll.*).

3699. *Æliomorpha pusana*, sp. n.

Head, pronotum and scutellum, body beneath and legs pale ochraceous; corium pale olivaceous-green, the costal area pale ochraceous; membrane greyish-white; connexivum pale ochraceous, with large segmental pale brownish spots; head robust, thickly punctate, the lateral margins strongly sinuate, central lobe very prominent, its apex distinctly passing the apices of the lateral lobes and distinctly depressed; antennæ ochraceous, the fourth and fifth joints piceous, first joint short, not nearly reaching apex of head, second short, third slightly longer than either fourth or fifth, which are subequal in length; pronotum finely and a little darkly granulose, anterior area paler and containing three large still paler spots, the lateral margins moderately sinuate, the posterior lateral angles subprominent; scutellum finely punctate, with a central broad longitudinal ridge, the lateral areas somewhat largely infuscate and each containing a minute pale ochraceous spot; corium thickly finely punctate; rostrum reaching posterior coxæ.

Length 6 millim.

*Hab.* Punjab (at light—Jalendha) (*Pusa Coll.*).

Both this and the preceding species, by the produced central lobe of the head, are at least subgenerically distinct.

Genus **ADRIA**. (Vol. I, p. 139.)

**ADRIA PARVULA**. (Vol. I, p. 139.)

*Pentatoma brevittata*, *Walk. Cat. Het. ii*, p. 312 (1867).

Add: *Hab.* South India; Salem (*Pusa Coll.*).

“On ragi earhead.”

Genus **OCHROPHARA**. (Vol. I, p. 146.)

**OCHROPHARA MONTANA**. (Vol. I, p. 147.)

Add: *Hab.* Madras (*J. A. Graham—Pusa Coll.*). Assam; Lushai Hills (*D. Hezlett*).

In addition to the particulars given (*supra*) as to this species being a food pest, it is now stated that the specimens sent from Madras were found on coffee; those from the Lushai Hills “on paddy.”



Mr. Bainbrigge Fletcher also informs me that "It occurs sporadically in enormous swarms, so much so that examples sent in lately were reported to have broken off large branches from jungle trees by the weight of the masses of bugs clustered on the trees."

Genus **HALYOMORPHA\***. (Vol. I, p. 152.)

**HALYOMORPHA PICUS.** (Vol. I, p. 152.)

Add: *Hab.* Dehra Dun; Thano (on Sal leaf).

3700. **Halyomorpha illuminata**, *Dist. Entomologist*, 1911, p. 22.

Ochraceous, more or less punctured with olivaceous-green or fuscous; head with dense olivaceous punctures, the margins moderately reflexed, the apex subtruncate, lateral lobes very slightly longer than the central lobe; antennæ blackish, basal joint ochraceous with an outer black line, first joint almost but not quite reaching apex of head, second shorter than third, third and fourth subequal in length, fifth a little longer with the base ochraceous; pronotum ochraceous, with dense olivaceous punctures, except on a discal transverse ochraceous area between but not reaching the lateral angles (this area is almost impunctate, but usually contains two maculate clusters of dark punctures), extreme margins narrowly ochraceous, lateral angles subprominent and broadly subangulate, lateral margins slightly reflexed; scutellum with dense dark punctures, a levigate ochraceous spot at each basal angle, the apex stramineous with concolorous punctures; corium thickly but more finely darkly punctate; membrane passing the abdominal apex, pale fuliginous but reflecting the dark abdomen beneath; body beneath and legs pale ochraceous; two spots on each side of pro- and mesosterna, one on each side of metasternum, abdominal spiracles and elongate spots on lateral margins, spots on apical areas of femora, apical third of anterior tibiæ and apices of tarsi, black.

Length 14; breadth between pronotal angles 8 millim.

*Hab.* Travancore (*G. S. Imray*).

3701. **Halyomorpha fletcheri**, sp. n.

Body above obscure dark olivaceous-green; pronotum with narrow lateral margins (not including lateral angles), a broken central longitudinal line, and a transverse series of six small spots across the anterior area, ochraceous; scutellum with a basal row of small spots, and the apex (largely) ochraceous; connexivum ochraceous, with large olivaceous spots at the segmental incisures; corium minutely and very obscurely dotted with ochraceous; membrane fuscous, veins black, apical area subhyaline; body beneath and legs ochraceous; broad lateral margins to head, broad

\* Since these pages were in press, Bergroth has described a species, *H. picticornis* from Bombay, which he doubtfully includes in the genus. I have not seen the species (*Journ. Bomb. N. H. Soc.* xxiv, p. 171, 1915).

submarginal fasciæ to sternum, submarginal fasciæ to abdomen connected with the outer margin at incisures, apical areas of femora, bases and apices of tibiæ, and apices of tarsi olivaceous-green or black; head much longer than broad, apically rounded, coarsely punctate; antennæ black, base and apex of fourth joint ochraceous, basal joint robust, not reaching apex of head, second shorter than third, fourth and fifth joints longest: pronotum and scutellum coarsely punctate and subrugulose; corium thickly but more smoothly punctate.

Length incl. membrane 14; breadth between pronotal angles 7 millim.

*Hab.* Upper Burma; Maymyo (*Bainbrigge Fletcher*).

Genus **TOLUMNIA**. (Vol. I, p. 153.)

*Mormoschema*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 269 (1909).

**TOLUMNIA IMMACULATA**, *Dist.* (Vol. I, p. 155.)

*Mormoschema immaculatum*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 270 (1909).

**TOLUMNIA HORNII**, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 269 (1909).

Described from Ceylon; Anuradhapura. Length  $9\frac{1}{4}$  millim. Allied to *T. trinota*, Westw., from the Malay Archipelago. I have either not seen this form or failed to recognize it.

Genus **CARPOCORIS**. (Vol. I, p. 157.)

**CARPOCORIS PALLIDUS**. (Vol. I, p. 158.)

Add: *Hab.* Kumaon; Mussoorie; Tehri Distr.; Kulin—"on *Verbascum*" (*A. D. Imms*).

Genus **DOLYCORIS**. (Vol. I, p. 159.)

**DOLYCORIS INDICUS**. (Vol. I, p. 160.)

Add: *Hab.* N. India; Kumaon; Dehra Dun (*A. D. Imms*).

Genus **SCYLAX**. (Vol. I, p. 160.)

**SCYLAX PORRECTUS** (Vol. I, p. 161, fig. 97); *Entomologist*, 1911, p. 23.

Since describing and figuring this species, I have received, by the kindness of Dr. Montandon, a male specimen from Kurseong, Sikkim.

♂. Smaller than female, the lateral lobes of the head somewhat widely separated before the apex of the central lobe, as in the female; anal segment in male produced on each side into a somewhat long robust curved spine; these spines are laterally very broad, and are provided beneath, near base, with a small tooth projecting inwardly.

This effectually disposes of the contention of Breddin (*Wien. Ent. Zeit.* xxvi, p. 93 (1907)), repeated by Kirkaldy (*Cat. Hem.*

Heteropt. i, p. 371 (1909)), that *S. porrectus*, Dist., and *S. macrinus*, Dist., were the sexes of one species. As both these species were figured (Trans. Ent. Soc. Lond. 1887, pl. xii, figs. 7 & 9), where they can both be seen to be female specimens, the suggestion always appeared to me to be bizarre, but until I received the male of *S. porrectus*, the refutation could well be deferred.

Genus **SEPONTIA**. (Vol. I, p. 164.)

3702. *Septontia nigrofusca*, sp. n.

Head shining brassy-black, thickly, somewhat coarsely punctate, its apex rounded, lobes about equal in length; antennæ ochraceous, apical area of the fourth and nearly the whole of the fifth joint piceous, first and second joints short, third a little longer, but much shorter than either fourth or fifth; pronotum declivous, bronzy-brown, somewhat thickly punctate, the lateral margins palely levigate, two larger transverse black spots on each side of anterior area, and a transverse series of more or less rounded black spots near basal margin; scutellum pale bronzy-brown, thickly, somewhat finely punctate, generally a little darker on basal area, three small pale spots on basal margin—one central and one at each basal angle; body beneath dark castaneous, coxæ, legs, and narrow sternal and abdominal margins paler and more ochraceous; apices of tarsal joints black.

*Var.* Pronotum without the transverse series of basal black spots.

Length 4; breadth between pronotal angles  $3\frac{1}{2}$  millim.

*Hab.* Nilgiri Hills (*T. V. Campbell*).

**SEPONTIA VARIOLOSA** (Vol. I, p. 165); *Bredd. Ann. Soc. Ent.*

*Belg.* liii, p. 271 (1909).

Add: *Hab.* Ceylon; Matala, Kandy, Bandarawella, Negombo (*vide* Breddin).

**SEPONTIA IMPURA**, *Bredd. Arch. Naturg. Berl.* 1913, p. 102.

This species was described from Madras. Length  $3\frac{1}{2}$ ; breadth between pronotal angles 3 millim.

Genus **EUSARCOCORIS**\*. (Vol. I, p. 165 & Vol. IV, p. 439.)

**EUSARCOCORIS GUTTIGER**. (Vol. I, p. 165.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

**EUSARCOCORIS VENTRALIS** (Vol. I, p. 167); *Bredd. Ann. Soc. Ent. Belg.* liii, p. 273 (1909).

Breddin has recorded this species from Ceylon; Mihintale, Kanthalay, Anuradhapura. India; Sara Ghat (*H. H. Mann*—at light).

\* Bergroth in a paper which I have only just seen (*Journ. Bomb. N. H. Soc.* xxiv, p. 172, 1915), has described a species, *E. proximus* from Bombay which is stated to differ from *E. guttiger*, "by the considerably narrower post-frenal part of the scutellum."

*EUSARCOCORIS TAPROBANENSIS* Bredd. (*Eusarcocoris*), *Ann. Soc. Ent. Belg.* liii, p. 273 (1909).

Described from Ceylon; compared with *E. bovillus*, Dall. Length  $5\frac{1}{2}$ –6 millim.

3703. *Eusarcocoris major*, sp. n.

Head ochraceous, with dense black punctures, margins of the central lobe also black, central base of head less punctate and paler, apex rounded; antennæ ochraceous, basal joint not reaching apex of head, second joint longer than third, fourth and fifth joints longest and subequal; pronotum ochraceous, with dense, coarse, dark punctures, anterior and lateral margins narrowly levigate and pale ochraceous, the lateral angles broad and subprominent, on anterior area two transverse black-margined moderate callosities, between the pronotal angles a more or less continuous, waved, levigate pale ochraceous, fasciate line which centrally emits another line not reaching posterior margin; scutellum ochraceous, with coarse dark punctures, centrally much more sparingly punctate and irregularly sublevigate, the basal angles and a central basal spot also pale levigate; corium ochraceous, thickly darkly punctate, with a distinct pale levigate discal spot a little before apical margin; membrane subhyaline, the veins darker and extending beyond the abdominal apex; head beneath and sternum black, rostrum, legs, and some sternal spots ochraceous; abdomen beneath bright, shining black, its lateral margins narrowly ochraceous; rostrum reaching the posterior coxæ, its apex black; abdomen beneath somewhat coarsely punctate.

Length 8; breadth between pronotal angles 6 millim.

*Hab.* Bombay (*Dixon*).

Genus **HERMOLAUS**. (Vol. I, p. 169.)

3704. *Hermolaus robustus*, sp. n.

Head long, apically acuminate, central lobe very slightly apically prominent, the lateral margins a little concavely sinuate before eyes, ochraceous, the lateral lobes and basal area centrally darkly punctate, the central lobe prominently paler, sometimes joined to a paler spot at base; antennæ pale ochraceous, first, second and third joints shortest, fourth longest; pronotum ochraceous, thickly darkly punctate, a somewhat pale testaceous spot near centre of apical margin, on each side of which is a transverse black spot, the lateral margins narrowly, palely levigate; scutellum ochraceous, somewhat thickly darkly punctate, with black suffusions near base, and a more or less distinct black spot at apex, a transverse series of very small ochraceous spots on basal margin; corium ochraceous, darkly punctate; connexivum ochraceous, spotted with black; body beneath black, the sternum more castaneous and thickly

punctate, legs and lateral abdominal margins ochraceous, the latter with outer black spots. A short, robust species.

Length  $3\frac{1}{2}$ ; breadth between pronotal angles 3 millim.

*Hab.* Nilgiri Hills; Coonoor (*T. V. Campbell*).

3705. *Hermolaus horni*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 271 (1909).

Pale brownish-ochraceous, somewhat thickly darkly punctate; scutellum with a central elongate dark spot before apex; apical lateral margins of the central lobe of head, and the transverse cicatrices on anterior area of pronotum piceous or darker brownish; sternum ochraceous, darkly punctate; abdomen beneath more greyishly ochraceous, with dense darker punctures, a central longitudinal stripe—which is more attenuate posteriorly—and the lateral margins castaneous, the paler interspace between the castaneous markings containing two series of smaller whitish spots; small pale spots near bases of coxæ; legs pale ochraceous, finely speckled with piceous or dark brown; antennæ ochraceous, second and third joints subequal in length, fourth longest, fifth distinctly thickened, shorter than fourth; basal margin of scutellum with some small, sometimes indistinct, pale spots; other structural characters as in generic diagnosis.

Length incl. membr. 4 to  $4\frac{1}{2}$  millim.

*Hab.* Ceylon (*J. C. F. Fryer*), Nalanda (*vide* Breddin). N.E. Madras, S. end of Lake Chilka (*Annandale*). Calcutta (*Ind. Mus.*).

Breddin has also described another species from Ceylon (*H. latiusculus*, *Ann. Soc. Ent. Belg.* liii, p. 272, 1909)). This appears to be a large form of the genus, "Length with membrane," 6 millim., but I have not yet seen a specimen to illustrate it.

Genus **CARBULA**. (Vol. I, p. 170 & Vol. IV, p. 440.)

**CARBULA RUGULOSA**. (Vol. I, p. 171.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

**CARBULA BIGUTTATA**. (Vol. I, p. 172.)

Add: *Hab.* Ceylon; Trincomalee (*E. E. Green*). South India; Chikkaballapura (*T. V. Campbell*).

**CARBULA INSOCIA**. (Vol. I, p. 173.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

3706. *Carbula aliena*, sp. n.

Head and pronotum ochraceous, thickly coarsely punctate, the head more darkly so; pronotum with the lateral margins concave and narrowly palely levigate, the lateral spines black, robust, and



a little upwardly and forwardly directed; antennæ ochraceous, the apical joint fuscous; scutellum stramineous, with prominent black punctures, more densely so on basal and lateral areas, which give the appearance of denoting a large pale levigate spot in each basal angle, the disk sparingly punctate, the apex almost impunctate; corium ochraceous, thickly darkly punctate, the posterior internal area carmine-red; connexivum stramineous, apical margins of the segments black; body beneath and legs stramineous, a minute black spot at base of each coxa; femora minutely spotted with black.

Length  $6\frac{1}{2}$ ; breadth between pronotal angles  $4\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Allied to *C. scutellata*, Dist. (vol. i, p. 172), but differing by its smaller size, the shorter and more forwardly directed pronotal angles, the denser and darker punctures on the scutellum, &c.

### Genus **NEOCARBULA**, nov.

Type, *N. capitata*, Dist.

*Distribution.* N. India.

Head about as long as breadth between eyes, the lateral lobes a little longer than the central lobe but not meeting in front of it, their lateral margins sinuate, their apices moderately recurved inwardly, on the anterior area the central lobe is prominent, and on the apical third there is a short oblique ridge on each side of the central lobe; ocelli near base and eyes; antennæ four-jointed, with the first joint short, not nearly reaching apex of head, second joint longest, third and fourth almost subequal in length; pronotum about half as long as width at base, the anterior area strongly declivous the lateral angles non- or sub-prominent; scutellum about as long as broad at base, gradually narrowed towards apex, which is somewhat broad and rounded; corium about as long as scutellum; membrane hyaline with longitudinal veins; rostrum almost reaching the posterior coxæ.

The structure of the head as given in a sectional drawing of the typical specimen is one of the leading characters of this genus.

#### 3707. *Neocarbula capitata*, sp. n.

Head black, thickly coarsely punctate, the central lobe and anterior ridges more ochraceous; antennæ ochraceous; pronotum ochraceous, darkly punctate, the anterior area much paler, posteriorly delimited by a transverse, waved pale line, and containing a transverse dark cicatrice on each side; scutellum ochraceous, with dense darker punctures, a pale glabrous spot near each basal angle, and two somewhat indistinct dark spots on the apical area; corium ochraceous, somewhat thickly, darkly punctate; body beneath and legs ochraceous, abdomen with a narrow, waved, longitudinal sublateral darker fascia on each



side, and a very broad black central fascia; structural characters as in generic diagnosis.



Fig. 68.—*Neocarbula capitata*.

Length  $6\frac{1}{2}$ ; breadth between pronotal angles 4 millim.

*Hab.* United Provinces; Rurki.

### Genus **BAINBRIGGEANUS**, nov.

Type, *B. fletcheri*, Dist.

*Distribution.* Pusa.

Head about as long as breadth between outer margins of eyes, the central lobe prominent, but scarcely longer than the lateral lobes, which are laterally concavely sinuate; antennæ five-jointed, basal joint not reaching apex of head; pronotum more than twice as broad between lateral angles as centrally long, the angles moderately roundly prominent; scutellum almost as long as broad at base, the lateral margins a little sinuately oblique, the apex subangulately rounded; corium outwardly a little passing the apex of scutellum; membrane hyaline with longitudinal veins; mesosternum centrally carinate; rostrum reaching posterior coxæ.

Allied to *Paracritheus* (vol. i, p. 178).

#### 3708. *Bainbriggeanus fletcheri*, sp. n.

Head black, thickly coarsely punctate; antennæ ochraceous,



Fig. 69.—*Bainbriggeanus fletcheri*.

fourth and fifth joints black or blackish, second and third joints subequal in length, fourth and fifth longer, fifth slightly longest;

pronotum ochraceous, darkly punctate, the anterior area paler and containing two transverse, anterior blackish cicatrices; scutellum black, thickly coarsely punctate, apex and a connected central fascia not extending beyond middle, ochraceous, sparsely blackly punctate; corium ochraceous, thickly coarsely punctate; membrane hyaline, reflecting the dark abdomen beneath, basal area more or less, and the veins, brownish-ochraceous; abdomen beneath and legs thickly punctate, abdomen with a broad, central, black longitudinal stripe. Other characters as in generic diagnosis.

Length  $5\frac{1}{2}$ –6; breadth between pronotal angles  $4\frac{1}{2}$ –5 millim.

*Hab.* Bengal; Pusa (*Bainbrigge Fletcher*—on Kangoni).

Genus **PLAUTIA**. (Vol. I, p. 180.)

3709. *Plautia picturata*, sp. n.

Head ochraceous, central lobe narrowly margined with black, basal margin also black; antennæ mutilated, basal joint ochraceous; eyes black; pronotum and scutellum stramineous; pronotum with eight pale violaceous prominent spots, six at base (longitudinal) and two anterior (transverse), scutellum with four pale violaceous spots, two at base (transverse) and two beyond middle (elongate and angulate); corium pale carmine, ochraceous on basal area; connexivum stramineous with marginal black spots; membrane fuscous, its apex paler; body beneath and legs ochraceous, a marginal black spot on each side of meso- and metanotum, and an abdominal segmental series of three black spots on each lateral area; pronotum, scutellum and corium more or less thickly punctate; scutellum about as long as broad at base, sinuately narrowed to apex.

Length 10; breadth between pronotal angles 6 millim.

*Hab.* Bombay; Matheran.

Bredden (Ann. Soc. Ent. Belg. liii, p. 277 (1909)) has described a small species from Ceylon under the name of *P. minor*. He allies it to *P. fimbriata* (vol. i, p. 181), and gives the length  $6\frac{1}{4}$  millim. This should ally it very closely to *P. viridicollis*, Westw., also recorded from Ceylon (vol. i, p. 182).

Genus **ANTESTIA**. (Vol. I, p. 183.)

Bredden (Ann. Soc. Ent. Belg. liii, p. 278 (1909)) has described a species from Ceylon under the name of *A. plautioides*. It is said to be allied to *A. cruciata*, Fabr. (vol. i, p. 185), and may prove to be what, in my opinion, is a variety of that species. Its length is given as 8 millim.

Genus **GYNENICA**. (Vol. I, p. 188.)

**GYNENICA AFFINIS**. (Vol. I, p. 188.)

Add: *Hab.* South India; Coimbatore (*Pusa Coll.*).  
On *Barleria prionitis*.

Genus **AGONOSCELIS**. (Vol. I, p. 189.)3710. *Agonoscelis campbelli*, sp. n.

Head, pronotum, scutellum and corium blackish, very strongly punctate and wrinkled; head long and narrow, slightly attenuated and distinctly rounded at apex, the central lobe prominent and it and the lateral margins more or less testaceous; antennæ black, first joint not reaching apex of head, second very slightly shorter than third, fourth longest, fifth subequal to third; pronotum with the anterior and lateral margins very narrowly ochraceous, the anterior area with five testaceous spots, the central largest, the others arranged in pairs on each side and transversely linear; scutellum with a central longitudinal and anterior lateral fasciæ dark ochraceous or testaceous, the apex and apical lateral margins greyish-white; corium more or less tessellated with pale ochraceous or greyish-white; membrane pale fuscous, the veins prominently black; body beneath (imperfectly seen in carded specimens) ochraceous, the abdomen more testaceous and spotted with black; legs and rostrum black; pronotal lateral angles subprominent; apex of scutellum moderately foveate.

Length incl. membrane 9-10 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Genus **EURYDEMA**. (Vol. I, p. 190.)**EURYDEMA PULCHRUM**. (Vol. I, p. 190.)

Add: *Hab.* United Provinces; Dehra Dun (*Dr. A. D. Imms*).

Genus **MADATES**, n. nom.

*Cinxia*, *Stål*, vol. i, p. 194, nom. præocc.

*Datames*, *Horv.*, *Ann. Mus. Hung.* vii, p. 631 (1909), nom. præocc.

*Madates*, *Strand*, *Soc. Ent.* xxv, p. 19 (1910), n. nom.

The name *Cinxia* having been proved to be preoccupied, Horvath proposed that of *Datames* to take its place. Strand finding that also preoccupied then substituted the name *Madates*, which must now be used.

Genus **COMPASTES**. (Vol. I, p. 200.)3711. *Compastes taurus*, *Dist. Entomologist*, 1911, p. 23.

Body above castaneous-brown; apex of scutellum, body beneath and legs ochraceous; head coarsely darkly punctate, the lateral lobes divergent at their apices, lateral margins slightly sinuate, apex broadly rounded; antennæ with the first and second joints ochraceous, mottled with brownish, third black, ochraceous at

base (remaining joints mutilated in type), first joint not reaching apex of head, second slightly shorter than third; pronotum coarsely darkly punctate, the lateral angles broad, short, a little directed upwardly and forwardly, their apices trisinate, the anterior and posterior angles subacute, the lateral pronotal margins sparingly dentate, an obscure central pale levigate line, and between the lateral angles transversely subrugulose; scutellum more finely punctate and transversely wrinkled, the basal area moderately elevated; corium thickly, somewhat finely punctate; membrane bronzy-brown, a little passing the abdominal apex, an obscure ochraceous spot at the outer basal angle; sternum blackly punctate, orificial areas broadly blackish; abdomen beneath finely mottled with pale brownish, spiracles and linear marginal spots black; legs finely mottled with brownish; rostrum reaching the posterior coxæ, its apex black; mesosternum centrally sulcate.

Length ♀, 17; breadth between pronotal angles 11 millim.

*Hab.* Sikkim; Kurseong.

The comparatively short, apically tricarinate, lateral angles of the pronotum will distinguish this species. It was received through Dr. Montandon.

#### Genus **TROPICORIS**. (Vol. I, p. 204.)

**TROPICORIS LÆVIVENTRIS**. (Vol. I, p. 205, fig. 127.)

Add: *Hab.* Nainital and Lebong (*Pusa Coll.*). Kumaon, Chubbattia (*A. D. Imms*).

When previously enumerating and figuring this species, I only knew it by a specimen from Signoret's collection now contained in the Vienna Museum and labelled "India." I am now able to give more precise localities. The specimens before me vary in length from 18 to 20 millim.

#### Genus **PRIASSUS**. (Vol. I, p. 205.)

**PRIASSUS EXEMPTUS**. (Vol. I, p. 206.)

Add: *Hab.* United Provinces; Dehra Dun (*F. J. Thomson*). Sikkim; Lebong, 5000 ft. (*H. M. Lefroy*).

#### Genus **PRIONACA**. (Vol. I, p. 207.)

3712. **Prionaca nigrecens**, *Dist. "Entomologist,"* 1911, p. 24.

Black, more or less mottled with ochraceous; head punctate, transversely wrinkled, with fine, more or less distinct longitudinal carinate lines, the most prominent at the middle of the central lobe, the apex rounded, the lateral lobes very slightly longer than the central lobe and cleft at their apices; antennæ black, first joint not reaching the apex of head, second longest, third and fourth subequal, the latter ochraceous at base; pronotum coarsely

punctate and rugulose, with scattered ochraceous mottlings, a central ochraceous line not reaching base, on each side of which is a levigate ochraceous spot, lateral angles robust, somewhat strongly, laterally and a little upwardly produced, their apices shortly acute, their margins serrate, lateral pronotal margins shortly obtusely dentate; scutellum thickly punctate, three levigate ochraceous spots at base, one at each basal angle, and the third central, the lateral and apical margins very narrowly and obscurely dull ochraceous; corium thickly punctate, a somewhat large irregular impunctate ochraceous spot a little behind middle of disk; membrane pale bronzy-brown; connexivum pale testaceous spotted with black; sternum black, greyishly tomentose, finely punctate; abdomen dull ochraceous, the spiracles and lateral marginal spots black; coxæ and femora ochraceous, apical areas of femora, and the whole of the tibiæ and tarsi, black; rostrum just reaching the posterior coxæ, its apex black; abdominal spine not extending beyond the posterior coxæ; sternum distinctly centrally sulcate.

Length, ♂  $9\frac{1}{2}$ , ♀  $10\frac{1}{2}$ ; breadth between pronotal angles, ♂ 7, ♀ 8 millim.

*Hab.* Sikkim; Kurseong.

Genus **DEGONETUS**. (Vol. I, p. 208.)

**DEGONETUS SERRATUS**. (Vol. I, p. 209.)

Add: *Hab.* Bombay; Matheran (*Pusa Coll.*).

Genus **PLACOSTERNUM**. (Vol. I, p. 209.)

3713. **Placosternum ficusius**, sp. n.

A short, broad species allied to *P. taurus* (vol. i, p. 209, fig. 132), but with the lateral margins of the pronotum much less strongly dentate, the punctures finer and less confluent, the lateral spines shorter and only unisinate; scutellum more finely and regularly punctate, the punctures non-confluent; corium more finely and less confluent punctured; apex of scutellum more broadly rounded.

Length 19; breadth between pronotal angles 14 millim.

*Hab.* Simla (on Banian tree). Dehra Dun.

Genus **AMBYCARA**. (Vol. I, p. 217.)

**AMBYCARIA GLADIATORIA**. (Vol. I, p. 217.)

Add: *Hab.* Australia; Queensland (*F. P. Dodd*).

Genus **CATACANTHUS**. (Vol. I, p. 218.)

Bredden (Ann. Soc. Ent. Belg. liii, p. 276 (1909)) has described a species (*C. horni*) which he had recorded as a variety of *C. incarnatus* in 1903. It is from Ceylon.



Another variety of *C. incarnatus*, or at least thus considered and treated by other workers, has also been raised to specific rank by Breddin:—

**CATACANTHUS IMMACULATUS.**

*Catacanthus incarnatus*, var. *C.*, Stål, *Svensk. Vet. Handl.* xiv, no. 4, p. 89 (1887); var. *immaculatus*, Leth. & Sever. *Cat. Hem.* i, p. 163 (1903).

*Catacanthus immaculatus*, Bredd. *Ann. Soc. Ent. Belg.* liii, p. 277 (1909).

Genus **NEZARA**. (Vol. I, p. 219.)

**NEZARA GRAMINEA.** (Vol. I, p. 221.)

Add: *Hab.* Bengal; Pusa, Behar (*M. Singh*), Chapra (*Mackenzie*). United Provinces; Allahabad (*A. D. Imms*). Bombay; Surat (*Pusa Coll.*). Ceylon; Trincomalee (*Green*).

Two specimens sent by Dr. Imms from Allahabad are larger than any specimens yet received from other localities and attain a length of 10 millim.

Genus **PIEZODORUS**. (Vol. I, p. 224.)

**PIEZODORUS RUBROFASCIATUS.** (Vol. I, p. 224.)

Add: *Hab.* Pusa (on Indigo).

**Genus CHAUBATTIANA.**

*Chaubattiana*, *Dist. A. M. N. H.* (8) x, p. 603 (1912).

Type, *C. rubrovittata*, *Dist.*

*Distribution.* Bengal.

Subelongate; head longer than width between eyes, narrowed towards apex, the lateral margins distinctly sinuate, somewhat angulate before the eyes; lobes of equal length, the apex subtruncate; eyes large, somewhat strongly produced, reaching the apices of the anterior pronotal angles, ocelli near base of head and close to inner margins of eyes; antennæ five-jointed, basal joint short, not nearly reaching apex of head, remaining joints almost subequal in length, second and third slightly longest; rostrum slender, reaching the posterior coxæ, first joint not reaching base of head, second about reaching anterior coxæ; pronotum about half as long as broad at base, posterior angles not produced, anterior margin concave, lateral margins oblique, entire, neither serrate nor crenulate, basal margin truncate before scutellum, thence oblique to lateral angles; scutellum passing the middle of abdomen, about as long as broad at base, sinuate beyond middle and near inner angle of corium and prominently narrowed to apex, which is rounded, apical margin of corium moderately sinuate; connexivum exposed from about one-third from basal margin of corium; membrane not or only slightly passing the abdominal apex; abdomen



beneath acutely spined at base, the spine about reaching the apex of posterior coxæ, abdominal spiracles prominent.

This genus, in the arrangement pursued (vol. i), will be placed in the division *Nezaria* (p. 218), and in that enumeration must be located near *Piezolorus*.

3714. *Chaubattiana rubrovittata*, *Dist. A. M. N. H.* (8) x, p. 604 (1912).

Head testaceous, subrugulose, extreme base and posterior margins of eyes ochraceous, ocelli purplish red; antennæ ochraceous, fourth and fifth joints fuscous, base of fourth ochraceous; pronotum testaceous, irregularly punctate, extreme lateral margins, basal margin, an irregular central longitudinal fascia, and a narrow, waved, transverse, linear fascia, dull greyish

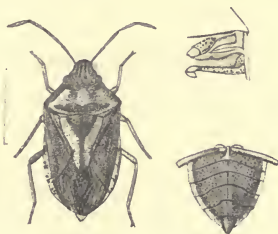


Fig. 70.—*Chaubattiana rubrovittata*.

or pale ochraceous; scutellum pale ochraceous, sparingly punctate, and with a somewhat broad, central, longitudinal, sanguineous fascia, in some specimens a sanguineous spot near each basal angle; corium pale ochraceous, finely darkly punctate; body beneath thickly finely punctate, metanotum more or less opaque purplish-red; apex of rostrum black; other structural characters as in generic diagnosis.

Length 8–9 millim.

*Hab.* Bengal; Chaubattia, Kumaon (*A. D. Imms*).

Genus **MENIDA**. (Vol. I, p. 226 & Vol. IV, p. 444.)

**MENIDA PUNDALUOYÆ**. (Vol. IV, p. 444.)

Add: *Hab.* South India; Kodaikanal (*T. V. Campbell*), Trichinopoly (*Dubrieul*). Bengal; Burdwan.

**MENIDA LABECULA**. (Vol. I, p. 229.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

**MENIDA WELLAWAYÆ.** (Vol. IV, p. 445.)

Add : *Hab.* Calcutta (*Brit. Mus.*).

**MENIDA FORMOSA.** (Vol. I, p. 226.)

Add : *Hab.* Ceylon (*J. C. F. Fryer*).

Breddin, under the name of *M. ceylanica* "[= *M. formosa* auct. partim]," has proposed another species from Ceylon (*Ann. Soc. Ent. Belg.* liii, p. 280 (1909)).

**MENIDA HISTRIO.** (Vol. I, p. 228.)

*Pentatoma bengalensis*, *Westw. in Hope Cat.* i, p. 36 (1837).

*Menida histrio*, *Dist. Proc. Zool. Soc. Lond.* 1900, p. 815; *var. dilutior*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 280 (1909).

*Menida ceylanica*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 280 (1909).

*Menida bengalensis*, *Kirk. Cat. Hem. Het.* i, pp. 131 & 368 (1909).

Add : *Hab.* Ceylon (*J. C. F. Fryer*); Kandy (*E. E. Green*).

### Genus **EURYMENIDA.**

*Eurymenida*, *Bergr. Proc. U.S. Nat. Mus.* 51, p. 217 (1916).

Type, *E. vallicola*, *Bergr.*

*Distribution.* Kashmir.

"Body broadly oval. Head much broader than long, ante-ocular part very short, narrowing towards the broad apex, scarcely sinuate before the eyes. Scutellum reaching far beyond the middle of the abdomen, the post-frenal part much broader than long, apex very broadly rounded. Frena scarcely reaching the middle of the scutellum. Other characters as in *Menida*, *Motsch.*"

3715. ***Eurymenida vallicola***, *Bergr. Proc. U.S. Nat. Mus.* 51, p. 218 (1916).

"Polished black, finely and rather sparingly punctate; an oblong anteapical area to the brownish-black corium and the middle of the venter impunctate; an interrupted line on the clypeus, a vitta on the juga, a round dot at the anterior margin of the eyes, three or four spots on vertex, the bucculæ, a dot between them and the antenniferous tubercles, numerous small irregular spots on the pronotum (particularly its anterior half), apical and lateral margins of pronotum (very narrowly), an oval smooth callose spot near the basal angles of the scutellum, a few transverse irregular spots behind these, the apex of the scutellum (rather broadly), lateral margin of corium, an oblong lateral spot to connexival segments, a spot at anterior and posterior margin of propleuræ, a curved vitta inside the apical half of their lateral margin, posterior angle of mesopleuræ, lateral borders of meta-pleuræ, official prolongation, all acetabula, basal spine of venter, a double row of discal spots to venter (one on each segment), not

far from the median line, an oblong lateral spot to ventral segments, two smaller rounded spots inside each lateral spot, and the sides of the male genital segment (inclosing a fuscous subapical spot), yellow or reddish yellow; antennæ yellowish testaceous, apex of third joint, the fourth (except base) and the fifth fuscous; membrane hyaline with a large rounded fuscous subbasal spot; legs yellowish testaceous, femora very finely dotted with brown and with a piceous ring (interrupted above) somewhat before apex."

"Length without membrane—male 5; breadth 4–5 millim."

*Hab.* "Kashmir; Goorais Valley."

I have not seen this species.

### Genus **KHONDANA**, nov.

Type, *K. rubriplaga*, Walk.

*Distribution.* India.

Differing from *Menida* by the elongate form of the body, the more oblique, continuous, and less sinuate lateral margins of the head; the longer and narrower scutellum, the apical area of which is distinctly narrowed, the apex distinctly centrally sulcated; connexivum exposed for more than its posterior half; ventral spine longer and less robust, &c.

#### **KHONDANA RUBRIPLAGA.**

*Menida rubriplaga* (vol. i, p. 229).

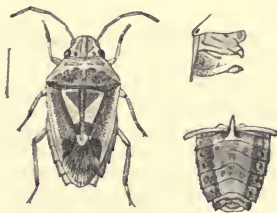


Fig. 71.—*Khondana rubriplaga*.

Add: *Hab.* N.W. India; Peshawar Distr. (*T. Bainbrigge Fletcher*—on *Tamarix indica*). Bengal; Pusa.

### Genus **KERIAHANA**, nov.

Type, *K. elongata*, Dist.

*Distribution.* British India.

Allied to the preceding genus *Khondana* by the elongate body, but differs in the broadly depressed and apically subtruncate head,

which is about as long as breadth between eyes; the pronotum is about twice as broad at base as the medial length, its lateral margins moderately oblique. The basal abdominal spine is also short and rudimentary.

**KERIAHANA ELONGATA.**

*Menida elongata*, *Dist.* (vol. i, p. 230).

Add: *Hab.* Bengal; Pusa.

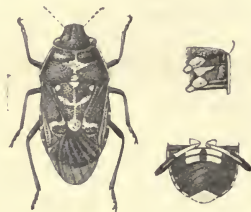


Fig. 72.—*Keriahana elongata*.

**KERIAHANA BISIGNATA.**

*Menida bisignata*, *Walk.* (vol. i, p. 230).

Genus **ACESINES.** (Vol. I, p. 231.)

3716. **Acesines bambusana**, sp. n.

Head and about anterior half of pronotum ochraceous, mottled and punctured with piceous, basal area of pronotum darker, more dark olivaceous and darkly punctate; scutellum olivaceous, thickly punctate, the apical margin very narrowly black; corium pale olivaceous, thickly punctate; membrane bronzy-brown; connexivum greenish-ochraceous; sternum ochraceous; abdomen beneath more darkly ochraceous, its lateral margins olivaceous; lateral sternal areas more or less darkly punctate; legs pale olivaceous; head short, almost equally long and broad between the eyes, broadly rounded at the apex, obsoletely punctate, lateral margins not sinuated, but slightly recurved; mesosternal process slender, narrowed anteriorly; metasternal process situate between the intermediate and posterior coxæ; ventral spine short, but robustly distinct; antennæ pale olivaceous, apical area of the fourth and the whole of the fifth joint brownish.

Length 11–12; breadth between pronotal angles 7 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*). On bamboo.

Genus **DUNNIUS**. (Vol. I, p. 231.)

*Mycterizon*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 279 (1909).

**DUNNIUS BELLUS**. (Vol. I, p. 233.)

*Mycterizon bellus*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 279 (1909).

Add: *Hab.* N.E. Madras; S. end of Lake Chilka (*N. Annandale*).  
Pusa.

Genus **IPHIIARUSA**.

*Iphiarusa*, *Bredd. Wien. Ent. Zeit.* xxiii, p. 12 (1904).

Type, *I. compacta*, Dist.

*Distribution.* Tonkin. Assam.

Head declivous in an oblique direction with the anterior area of the pronotum from between the pronotal angles; head a little longer than breadth between eyes, the lateral margins moderately concavely sinuate, central lobe very slightly projecting beyond the lateral lobes; antennæ with the basal joint moderately thickened, not nearly reaching the apex of head; pronotal angles strongly, robustly, slightly upwardly produced, their apices broadly truncately rounded, posterior pronotal margin concave; scutellum broad at base, where it is about as broad as long, obliquely narrowing to apex, which is subacute; corium coarsely punctate, its apical margin a little rounded; membrane passing abdominal apex; mesosternal process extending between anterior coxæ, laterally compressed before the intermediate coxæ, its apex above convexly rounded; apical connexival, abdominal segment posteriorly spinous.

**IPHIIARUSA COMPACTA**.

*Anaxandra compacta*, *Dist. Tr. E. S.* 1887, p. 355; *Faun. Brit. Ind., Rhynch.* vol. i, p. 325 (1902).

*Iphiarusa aratrix*, *Bredd. Wien. Ent. Zeit.* xxiii, p. 13 (1904).

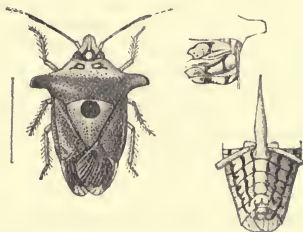


Fig. 73.—*Iphiarusa compacta*.

In describing this species in 1887 from a single specimen not in the best condition, I without doubt mistook its generic position; the present figure is taken from another specimen from Assam.

Breddin was certainly correct in his classificatory fixation, and I have seen a specimen from Tonkin, whence his type was derived, and there is now no question that the species is the same.

Length 10–11½; breadth between pronotal angles 10–11 millim.

Add: *Hab.* Tonkin; Chapa (*R. Vitalis de Salvaza*).

### Subfamily ASOPINÆ.

(Vol. I, p. 243 & Vol. IV, p. 446.)

Genus **CAZIRA**. (Vol. I, p. 245 & Vol. IV, p. 446.)

CAZIRA FRIWALDSKYI, *Horv.*, vol. i, p. 246.

Cazira bhoutanica, *Schout.*, vol. iv, p. 446.

As previously stated when enumerating Horvath's species, I had not seen it. It is now decided that Schouteden's proposed species must be accepted as a synonym.

CAZIRA ULCERATA. (Vol. I, p. 246.)

Add: *Hab.* Pusa; Behar (*C. S. Misra*).

### Genus ANASIDA.

Anasida, *Karsch, Berl. Ent. Zeit.* xxxvii, p. 481 (1892); *Schout. Wytsm. Gen. Ins.* fasc. lii, p. 52 (1907).

Type, *A. tenebrio*, Karsch; a West African species.

*Distribution.* West, East, and South Africa; Bombay.

Head about as long as broad at base, lobes of about equal length, the lateral lobes a little amplified and convexly round on the anterior lateral margins, concavely sinuate near middle; rostrum reaching the intermediate coxæ, robust, second joint longest, third shortest; antennæ slender, with the first joint not reaching apex of head; pronotum about half as long as greatest width at base, lateral angles more or less prominent, lateral margins sinuate and more or less serrate, anterior margin concave, posterior margin straightly truncate; scutellum longer than broad at base, obliquely narrowed for about two-thirds from base, and then somewhat straightly continued to apex, which is rounded; corium about twice as long as its apical margin, which is subtruncate; membrane passing the abdominal apex, the veins strong and robust.

3717. *Anasida orientalis*, *Dist. Entomologist*, 1910, p. 195.

Black; a central castaneous spot on basal margin of head; head rugosely punctate, about two-thirds the length of pronotum, lobes of equal length, lateral margins moderately concavely sinuate, ocelli reddish, the basal area less rugosely punctate than the anterior area; antennæ slightly pilose, with the first joint short,



not reaching apex of head, second shorter than either third or fourth, which are subequal in length, fifth scarcely shorter than fourth; pronotum rugosely punctate, the lateral margins remotely crenulate, and somewhat strongly sinuate, the posterior lateral angles prominent and inwardly longitudinally depressed, before anterior margin two transverse, obscurely opaque, slightly punctate cicatrices; scutellum transversely rugosely punctate, the apex

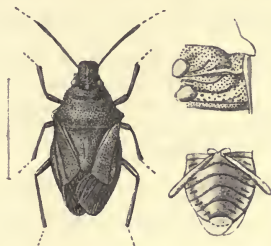


Fig. 74.—*Anasida orientalis*.

truncately rounded; corium opaque, finely punctate, the costal area more coarsely and thickly punctate; membrane moderately passing the abdominal apex; rostrum reaching the intermediate coxæ; sternum coarsely and somewhat sparingly punctate, the abdomen thickly and rugosely punctate; legs unarmed, tibiae above longitudinally sulcate.

Length, ♂ 17, ♀ 18 millim.

*Hab.* Bombay Province; Dharwar.

This first discovered Oriental species of the genus *Anasida*, hitherto regarded as purely Ethiopian, was found by Dr. Harold Mann among stones in a railway-cutting.

*A. orientalis* is allied to *A. funebris*, Dist., from Natal, and is the first species of the genus described from outside the Ethiopian region.

Genus **CANTHECONA**. (Vol. I, p. 248 & Vol. IV, p. 451.)

**CANTHECONA ROBUSTA**. (Vol. I, p. 250.)

Add: *Hab.* Ceylon (*J. C. F. Fryer*).

### Subfamily TESSARATOMINÆ.

(Vol. I, p. 256 & Vol. IV, p. 456.)

Genus **TESSARATOMA**. (Vol. I, p. 257.)

**TESSARATOMA NIGRIPES**. (Vol. I, p. 257.)

Stebbing (Ind. For. Mem. i, p. 21, 1910) has recorded this species as an enemy to "*lac*."

*Tessaratomia indica*, Bredd. *Arch. Naturg. Berl.* 1912, p. 80.

Described as allied to *T. javanica*, Thunb. (vol. i, p. 259), and as found in Ceylon and Madras. It is, I presume, what I consider as *T. javanica*, Thunb.

### Subfamily ACANTHOSOMATINÆ.

(Vol. I, p. 313 & Vol. IV, p. 464.)

Genus **SASTRAGALA**. (Vol. I, p. 318 & Vol. IV, p. 465.)

**SASTRAGALA SMARAGDINA**. (Vol. IV, p. 465.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

In some specimens of this species, the large ochraceous discal spot on the scutellum is narrowly outwardly margined with black, in others this character is absent.

**SASTRAGALA HETEROSPILA**. (Vol. I, p. 318.)

Add: *Hab.* South India; Mysore State and Chikkaballapura (*T. V. Campbell*).

### 3718. *Sastragala modesta*, sp. n.

Head ochraceous, ocelli red; pronotum ochraceous, rather more than basal half with coarse black punctures, the lateral spines black; scutellum ochraceous, darkly punctate, with a large rounded pale ochraceous smooth spot thickly and broadly margined with coarse black punctures, apex also smooth; corium ochraceous, with dense dark punctures, palely punctate on costal area, a transverse black spot near apical angle, apical abdominal spines black; body beneath and legs ochraceous; antennæ ochraceous, basal joint passing apex of head, second, third and fifth joints subequal in length, fourth a little longest; pronotal spines short, subacute, their apices slightly recurved; rostrum reaching the posterior coxæ.

Length 7-9; breadth between pronotal angles 5-5½ millim.

*Hab.* South India; Kodaikanal and Nilgiri Hills (*T. V. Campbell*).

A small species belonging to the group in which the scutellum is marked with a large ochraceous spot, and distinguished structurally by the small expanse between the pronotal angles.

**SASTRAGALA RUFISPINA**. (Vol. I, p. 319.)

I am now able to supplement my description of this species. In fresh specimens the colour above is violaceous green, the head and anterior area of the pronotum being only ochraceous; the antennæ (mutilated in type) are greenish-ochraceous, apex of third and the whole of the fourth joint black, apical joint still wanting in all the specimens now before me.

Length 15-17 millim.

Add: *Hab.* N. India; Mussoorie (*Dr. A. D. Imms*).

Genus **ELASMUCHA.**

*Elasmotethus* (vol. i, p. 326).

*Clinocoris*, *Oshan. Verz. Palæarkt. Hem.* i, p. 170 (1906).

*Elasmucha*, *Bergr. Ent. News*, xviii, p. 49 (1907).

In volume i, p. 326, I followed the synonymy of Lethierry & Severin for the genus *Elasmotethus*. In 1906 Oshanin substituted the name of *Clinocoris*, Hahn, as taking precedence. In 1907, Bergroth pointed out that *Clinocoris* could not be used, "being preoccupied by Fallén for the bed-bug." Stål's name therefore takes precedence.

**ELASMUCHA PUNCTATA.**

*Elasmotethus punctatum* (vol. i, p. 326).

**ELASMUCHA NILGIRENSIS.**

*Elasmotethus nilgirensis* (vol. i, p. 327).

Add: *Hab.* Japan.

**ELASMUCHA NEBULOSA.**

*Elasmotethus nebulosum* (vol. i, p. 327).

*Elasmucha necopinata*, *Kirk. Cat. Hem. (Het.)* i, p. 177 (1909).

**ELASMUCHA LEWISI.**

*Elasmotethus lewisi* (vol. i, p. 328).

**ELASMUCHA RECURVA.**

*Elasmotethus recurvum* (vol. i, p. 328).

**ELASMUCHA SCUTELLATA.**

*Elasmotethus scutellatum* (vol. i, p. 329).

**ELASMUCHA TRUNCATULA.**

*Elasmotethus truncatulum* (vol. i, p. 329).

**ELASMUCHA LINEATA.**

*Elasmotethus lineatum* (vol. i, p. 329).

**ELASMUCHA ASPERA.**

*Elasmotethus asperum* (vol. i, p. 330).

**3719. *Elasmucha albicincta*, sp. n.**

Head, pronotum, scutellum and corium dull ochraceous, with dense, coarse and rugose black punctures; lateral pronotal angles black, apical area of scutellum black, the extreme apex stramineous; membrane hyaline with fuscous suffusions; body beneath and legs ochraceous, lateral areas of sternum and abdomen blackly punctate; antennæ ochraceous, apex of fourth joint and the whole

of fifth black or blackish, basal joint stoutest and considerably passing apex of head, remaining joints almost subequal in length; head in front of eyes moderately narrowing to apex, which is rounded, the lateral margins concavely sinuate; pronotal angles strongly produced, their apices acute and slightly directed backwardly; scutellum elongate, subtriangular, the apex attenuate and rounded; abdominal apex with a black spine on each side; membrane considerably passing abdominal apex; mesosternal ridge produced backward between the intermediate coxæ.

Length incl. membr.,  $6\frac{1}{2}$ ; exp. pronot. angl. 4 millim.

*Hab.* E. Himalayas; Kurseong.

**3720. *Elasmucha tauriformis*, Dist. Entomologist, 1911, p. 104.**

Olivaceous brown, the corium more olivaceous, the membrane pale olivaceous brown; head sparsely, coarsely punctate, the lateral margins sinuate, the lobes subequal in length, the central lobe almost impunctate; antennæ piceous, basal joint not reaching apex of head, second and third subequal in length, each much longer than first, remaining joints mutilated in type; pronotum rather sparingly but very coarsely punctate, the punctures somewhat confluent near anterior margin, the lateral angles long and robust, transversely produced, their apices finely, acutely narrowed, the posterior angles distinctly, rather broadly posteriorly produced; scutellum sparingly coarsely punctured; corium very obscurely finely punctate; membrane not passing the abdominal apex; head beneath and sternum olivaceous brown, sparingly coarsely punctate; mesosternal process not reaching the anterior margin of the prosternum and backwardly produced between the intermediate coxæ; abdomen beneath greenish-olivaceous, abdominal spine almost reaching the intermediate coxæ; an obscure central longitudinal ridge, angles of the posterior segment broadly subprominent; rostrum about reaching the posterior coxæ.

Length  $9\frac{1}{2}$ ; breadth between pronotal angles 8 millim.

*Hab.* Punjab; Murree.

The long and apically spinously produced lateral angles of the pronotum are a distinctive feature of this species.

**3721. *Elasmucha montandoni*, Dist. Entomologist, 1911, p. 104.**

Ochraceous, with coarse dark punctures; produced pronotal angles carmine-red; scutellum with a large basal central oblong black spot; head coarsely punctate, the lateral margins almost impunctate; antennæ mutilated in typical specimen; pronotum coarsely punctate, the punctures somewhat confluent near anterior margin, lateral margins almost impunctate, a few punctures in linear series on their anterior areas, the lateral angles produced and apically recurved, their apices shortly subacute, posterior angles distinctly but shortly and obtusely produced backwardly; scutellum sparingly punctate, more thickly so on lateral margins, about apical fourth distinctly narrowed;

corium coarsely punctate; membrane slightly passing the abdominal apex; body beneath ochraceous; prosternum more or less coarsely darkly punctate; mesosternal process not reaching the anterior margin of the prosternum; abdomen with a transverse reddish-brown streak on each side of the fourth and fifth segments, two pale smooth ochraceous streaks on each side of the sixth segment, spiracles piceous; posterior angles of the anal segment in female moderately produced, curved, and carmine-red; abdominal spine scarcely passing the posterior coxæ; rostrum shortly passing the posterior coxæ.

Length 7; breadth between pronotal angles  $4\frac{1}{2}$  millim.

*Hab.* Bengal; Kurseong.

Dr. Montandon sent me a specimen (type) of this beautiful species.

In concluding the supplement to the Pentatomidæ, mention must be made of two species recorded in the 'Zoological Record' for 1914.

*Coptosoma montandoni*, *Bergr. Ann. Soc. Ent. Belg.* lviii, p. 183 (1914). Ceylon.

*Scotinophara lutheri*, *Bergr. l. c.* p. 184. Ceylon.

Owing to the present war conditions I have been unable to consult these descriptions. That part of the "Ann. Soc. Ent. Belg." is neither, at time of going to press with these pages (January, 1918), in the library of the British Museum nor has it been received by myself.

## Family COREIDÆ.

(Vol. I, p. 331 & Vol. IV, p. 466.)

Genus **OCHROCHIRA**. (Vol. I, p. 342.)

**OCHROCHIRA ALBIDITARซิส**. (Vol. I, p. 342.)

Add: *Hab.* Kumaon; Chaubattia (*Dr. A. D. Imms*).

Genus **MICTIS**. (Vol. I, p. 344.)

3722. **Mictis formidabilis**, sp. n.

Head, pronotum and scutellum fuscous-brown, more or less greyishly pubescent, this pubescence more distinct and thickly developed on head, anterior area of pronotum, and sometimes basal margin of scutellum, anterior area of pronotum minutely spotted with black and also with two larger and more distinct spots of the same colour; membrane dark bronzy-brown; body beneath reddish-ochraceous, a prominent white spot on each side of metasternum; legs dark reddish-brown; antennæ reddish-ochraceous, apices of first and second joints and about apical half of third black, fourth joint paler, excluding base, greyishly



pubescent, first and fourth joints longest and subequal, second and third joints shorter and subequal; lateral margins of the pronotum coarsely blackly serrate, the lateral angles prominently and somewhat acutely produced, and also black; posterior femora laminately, angularly developed on each side beneath near apex, posterior tibiæ in ♂ strongly angularly developed beneath near base, in ♀ only moderately longitudinally dilated on each side, more prominently on basal half.

Length, ♂ 27, ♀ 29; breadth between pronotal angles  $12\frac{1}{2}$  millim.

*Hab.* Ceylon; Ratnapura (*E. E. Green*).

Allied to *M. lateralis*, Walk., from Borneo.

### Genus **XYROPHOREUS.**

*Xyrophoreus*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 283 (1909).

Type, *X. tonsor*, Bredd.

*Distribution.* Ceylon.

Related to *Mictis*, fourth antennal joint longer than the third and very little shorter than the first; pronotal angles scarcely projecting, the fourth joint of rostrum twice as long as third and longer than second by one-fourth; femora above without spines;



Fig. 75.—*Xyrophoreus tonsor*.

posterior femora above and below with a dilated serrated edge, the edge on underside curved and ending before the apex of the femur in a large tubercle inserted at right angles, the middle and anterior femora near apices armed with an angular tooth; fore and middle tibiæ not broadened, posterior tibiæ strongly curved above and below, almost in their whole length a little widened, of even width, on the underside at base of the apical fifth armed with an acute tooth pointing beneath and to the front, the



narrowed end piece of tibiæ unarmed; third ventral abdominal segment in middle not bent backwards in a laminate process, but together with the apical margin of the fourth segment a little transversely raised, these short transverse ridges ending outside with short, transverse tubercles; the sixth abdominal segment in middle near hind margin with a short conical tubercle, the apical angles of the seventh abdominal segment not produced; otherwise as in *Mictis*.

3723. *Xyrophoreus tonsor*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 283 (1909).

Head, pronotum, scutellum and corium castaneous-brown, head darkly pubescent, membrane fuscous-brown; body beneath and legs reddish-brown, posterior tibiæ darker in hue; antennæ with the first, second and third joints castaneous-brown, the apices of the second and third joints black, fourth joint blackish-brown but less than basal half grayish, with pale testaceous mottlings; pronotum, scutellum and corium thickly, finely punctate and rugulose; abdomen above black, ornamented on each side with a submarginal, segmental series of large spots almost fasciately connected, either testaceous, ochraceous, or pale bright green in colour; structural characters as in generic diagnosis; in the ♀ the posterior tibiæ are without a subapical tooth.

Length 22–24; breadth between pronotal angles  $7\frac{1}{2}$ –8 millim.

*Hab.* Ceylon (*J. C. F. Fryer*); Kandy (*E. E. Green*); Kanthaley (*Dr. W. Horn*, fide *Bredden*).

I have scarcely a doubt that I have correctly identified Breddin's species. The colour markings of the upper surface of the abdomen are described by Breddin as a beautiful bright green, the sides of the dorsal segments, with the connexivum and the median band of spots on the back, pitchy-black. I prefer to describe the ground-colour as black, and the spots as either testaceous, ochraceous, or pale bright green.

Genus *ANOPLOCNEMIS*. (Vol. I, p. 346.)

*ANOPLOCNEMIS PHASIANA*. (Vol. I, p. 346.)

*Anoplocnemis castanea*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 284 (1909).

I included the *Mictis castanea*, Dall., as a synonym of *A. phasiana* Fabr. (*supra*), and Breddin has since (*supra*) treated it as a distinct species. This, however, is quite erroneous. The three species now known in the Indian fauna can be readily separated, apart from structural characters, by the colour and markings of the upper surface of the abdomen.

3724. *Anoplocnemis binotata*, sp. n.

♀. Head, pronotum and scutellum black, punctate and finely rugulose; corium brownish-ochraceous, membrane a little darker

and more bronzy; abdomen above black, with two discal transverse ochraceous spots situate on the margins of the third and fourth and fourth and fifth segments; body beneath black, very coarsely punctate and rugulose; legs black, more or less irregularly and sparingly granulate; antennæ with the first, second and third joints black, fourth joint ochraceous, its base narrowly, and again subapically black, first, second and fourth joints longest and subequal in length, third joint shortest; posterior femora thickened, tuberculate beneath at apex; posterior tibiæ moderately flattened and amplified.

Length 21; breadth between pronotal angles 7 millim.

*Hab.* North Assam; Mishni Distr., Tulang (*Capt. F. Bailey*).

Genus **PETILLIA**. (Vol. I, p. 348.)

**PETILLIA CALCAR**. (Vol. I, p. 351.)

Add: *Hab.* N. India; Dehra Dun (*Jasman*).

This species varies in the extent of the dilatation of the posterior tibiæ. It may, however, always be distinguished from the other Indian species enumerated in these volumes by the less dilated pronotal angles.

**PETILLIA ORNATICORNIS**, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 284 (1909).

This species is stated to be closely allied to *P. calcar* (*supra*), but I have not seen it. I have already recorded *P. calcar* from Ceylon.

*Hab.* Ceylon; Anuradhapura (*vide Breddin*).

Genus **HOMŒOCERUS**.

(Vol. I, p. 355 & Vol. IV, p. 466.)

3725. **Homœocerus apicicornis**, sp. n.

Head, pronotum and corium brownish-ochraceous; scutellum much paler ochraceous; lateral margins of pronotum finely serrate and narrowly black, the lateral angles broadly acutely produced, the apices a little upwardly recurved; antennæ with the first, second and third joints castaneous-brown and almost subequal in length, apical joint short, stout, slightly less than a third of the length of the preceding joint, narrowed at each end, ochraceous with the base narrowly castaneous; pronotum and corium thickly, finely punctate; scutellum obscurely punctate; connexivum brownish-ochraceous, with paler spots near segmental incisures; membrane bronzy-brown; on posterior disk of pronotum is a somewhat obscure central dark spot; body beneath and legs ochraceous; third joint of the rostrum a little longer than the fourth.

Length 15; breadth between pronotal angles 6 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Very closely allied in structure and general appearance to *H. inornatus*, Stål, but differing entirely in the shorter, stouter, and differently coloured apical joint of the antennæ.

3726. *Homœocerus picturatus*, sp. n.

Head, pronotum, scutellum and corium ochraceous, the basal area of pronotum and basal two-thirds of corium—not extending to costal area—carmine-red; antennæ with the first, second and third joints more or less carmine-red, fourth joint piceous with the base narrowly ochraceous, first joint stout with the edges carinate, second and third considerably less robust, fourth cylindrical, narrowed basally and apically, second a little longest, fourth about half the length of third joint; rostrum with the third joint longer than the fourth; pronotum with the lateral margins finely and obscurely serrate, the lateral angles moderately prominent and apically obtusely acute; pronotum punctate and rugulose; scutellum distinctly transversely striate; corium finely punctate.

Length 15–16; breadth between pronotal angles  $5\frac{1}{2}$ –6 millim.

*Hab.* South India; Chikkaballapura and Mysore State (*T. V. Campbell*).

Allied to *H. sigillatus*, Stål, and *H. prominulus*, Dall. In colour markings it is also allied to *H. scutellatus*, Dist., from South Africa.

3727. *Homœocerus borealis*, sp. n.

Head, pronotum, scutellum and corium greenish-ochraceous; pronotum and corium rugulose and punctate; head with a central longitudinal impression; antennæ moderately robust, basal joint dark ochraceous, second and third joints greenish-ochraceous, apical joint sometimes much darker in hue, first joint shorter than second, a little longer than third, fourth joint shortest; rostrum with the third joint longer than the fourth; scutellum finely punctate; membrane pale bronzy-brown; body beneath pale greenish-ochraceous, more or less strongly and distinctly punctate; legs ochraceous; pronotum somewhat elongate, the lateral margins almost obliquely straight.

Length 15; breadth between pronotal angles  $4\frac{1}{2}$  millim.

*Hab.* N. India; Dehra Dun.

Allied to *H. cordiger*, Stål, from which it differs by the structure of the rostrum, which has the third joint distinctly longer than the fourth.

3728. *Homœocerus australis*, sp. n.

Head, pronotum, scutellum and corium ochraceous, more or less distinctly punctate, basal area of pronotum and claval area of corium distinctly greenish; membrane pale bronzy-brown; antennæ with the basal joint stoutest, a little shorter than the second, which is darker in hue; rostrum with the third joint distinctly longer than the fourth; head cleft between the anten-

niferous tubercles; eyes black; pronotum with the lateral angles broadly, subacutely produced; body beneath and femora ochraceous, tibiae and tarsi more greenish in hue.

Length 15; breadth between pronotal angles 6 millim.

*Hab.* South India; Mysore State (*T. V. Campbell*).

Allied to the preceding species, *H. borealis*, Dist., but differing in having the lateral angles of the pronotum much more prominent, thus making the lateral margins more sinuate, and by the greater length of the second antennal joint compared with the first.

### 3729. *Homocercus indus*, sp. n.

Head, pronotum, scutellum and corium ochraceous, thickly darkly punctate; corium beyond middle more or less rosaceous, the lateral margin—narrowing beyond middle—stramineous; a pale stramineous central longitudinal line traversing pronotum and scutellum; two small central black spots on anterior area of pronotum, and two minute black spots near apex of scutellum; antennæ pale testaceous, the apical joint a little darker; connexivum pale stramineous; membrane pale bronzy-brown; body beneath and legs ochraceous, the legs more darkly so; sternum and abdomen minutely spotted with black, but imperfectly seen owing to type being a carded specimen; head moderately produced in front of antenniferous tubercles and with a central, more or less incised, longitudinal dark line; antennæ robust, the basal joint moderately incrassate, a little longer than head or fourth joint, second joint longest, longer than third; rostrum about reaching the intermediate coxæ, extreme apex black, first joint not reaching base of head; lateral pronotal angles rounded, non-prominent.

Length 14 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

### *HOMOCERCUS STRICORNIS.* (Vol. I, p. 360.)

Add: *Hab.* Dehra Dun.

### *HOMOCERCUS ORNATICOLLIS*, *Bredd. Arch. Naturg.* 1912, 6, p. 81.

From the description I cannot separate this proposed species from a varietal form of *H. angulatus*, Westw., with which its proposer compares it. In the series of specimens now before me there are varieties in which the pronotal angles are less developed, and conform to the expanse given by Breddin, "5 $\frac{2}{3}$ –6 mm."

### Genus *ASCHISTOCORIS*.

*Aschistus*, *Stål* (vol. i, p. 369 & vol. iv, p. 468), nom. præocc.

*Aschistocoris*, *Bergr. Ann. Soc. Ent. Belg.* liii, p. 185 (1909), n. nom.

### *ASCHISTOCORIS BREVICORNIS.*

*Aschistus brevicornis* (vol. i, p. 369).

Add: *Hab.* Central Prov.; Bhandara (on Dhak).

*Var.* ? *bombæus*.

*Aschistocoris bombæus*, *Bergr. Ann. Soc. Ent. Belg.* liii, p. 185 (1909).

*Hab.* *Bombay*.

Bergroth supplements his description with the statement: "colore insolita membrane opace a ceteris tribus speciebus divergens, *A. brevicorni* Dall. proximus."

**ASCHISTOCORIS NEPALENSIS.**

*Aschistus nepalensis* (vol. iv, p. 468).

**ASCHISTOCORIS SULCATUS.**

*Aschistus sulcatus* (vol. iv, p. 469).

Add: *Hab.* N. India; Dehra Dun, Sahhawala.

Genus **PHYSOMERUS.** (Vol. I, p. 383.)

**PHYSOMERUS PARVULUS.** (Vol. I, p. 384.)

Add: *Hab.* Ceylon; Maha Illupalama (*J. C. F. Fryer*).

Genus **PENDULINUS.** (Vol. I, p. 387 & Vol. IV, p. 473.)

*PENDULINUS SPINULICOLLIS*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 287 (1909).

*Hab.* Ceylon; Matala.

I have not seen this species, which seems from its described pronotal angles to be allied to *P. rostratus*, Dist.

Genus **PLINACHTUS.** (Vol. I, p. 390.)

**PLINACHTUS ACICULARIS.** (Vol. I, p. 391.)

This proves to be a very variable species from specimens now before me.

Genus **BRUNSELLIUS.** (Vol. I, p. 391.)

3730. **Brunsellius elongatus**, sp. n.

Head, pronotum, scutellum and corium pale reddish-ochraceous, more or less coarsely punctate; membrane pale bronzy-brown; body beneath and legs pale ochraceous, abdomen with a sublateral series of small black segmental spots on each side; head projecting in front of the antenniferous tubercles; antennæ carmine-red, fourth joint shortest, first, second and third joints subequal in length; rostrum with the first joint (excluding base) black, and about reaching base of head (remaining joints mutilated in type).

Length 14; breadth between pronotal angles  $3\frac{1}{2}$  millim.

*Hab.* Tenasserim; Myitta (*Doherty*).



Genus **CLETUS**. (Vol. I, p. 392.)**CLETUS STALI**, n. nom.*Cletus bipunctatus* (vol. i, p. 393), nom. præocc.

It having now been proved that the *C. bipunctatus*, H.S., was published before the description of Westwood's species under the same name, I propose that of *stali* as a substitute.

Bergroth, however (J. Bomb. N. H. Soc. xxiv, p. 173) is in error when he states that *C. bipunctatus*, Westw., is a synonym of the true *punctator*, Fabr., and again when he states that *punctator*, Fabr., is not identical with *trigonus*, Thunb. Stål (En. Hem. iii, p. 78, 1873) has given quite a contrary decision, which I have followed.

**3731. Cletus bovillus**, sp. n.

Head, pronotum, scutellum and corium ochraceous, thickly, coarsely punctate; apices of the lateral pronotal angles black; a more or less obscure greyish-white spot near the inner angle of the apical margin of the corium; membrane pale bronzy-brown; connexivum and body beneath stramineous, somewhat thickly spotted with black; legs pale ochraceous; antennæ testaceous, the apical joint darkest in hue, basal joint robust, subequal in length to second, third shorter than second, fourth shortest and thickened; pronotal lateral angles prominently, acutely directed upwardly and forwardly, their outer lateral margins crenulate, a distinct subbasal, robust, transverse carination which is angularly upturned on each side towards the lateral spines; scutellum triangular, its lateral margins straightly oblique, its apex subacute and greyish-white; sternum thickly coarsely punctate, abdomen more finely punctate.

Length 8-9½; breadth between pronotal angles 3½-4 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Allied to *C. rubidiventris*, Westw., but differing by the long, acute, and upwardly directed pronotal spines.

Bredden (Ann. Soc. Ent. Belg. liii, p. 291, 1909) has described another species from Ceylon under the name of *C. hoptomachus*. He allies it to *C. trigonus*, Thunb. "Length 7, breadth between pronot. angl. 3¾ mill." I have been unable to identify this description with any of the numerous Ceylonese specimens that have passed through my hands.

Genus **HAIDARA**. (Vol. IV, p. 474.)**HAIDARA ADMOTA**. (Vol. IV, p. 475.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).



Genus **CRASPEDUM**. (Vol. I, p. 399 & Vol. IV, p. 476.)

3732. **Craspedum campbelli**, sp. n.

Pale ochraceous; antennæ with the first joint about as long as head, moderately thickened, with stout long curved spines, second joint shorter than the first, third almost as long as first and second together, both second and third slender, fourth short and distinctly thickened; head with the anterior area bearing long spinules especially at apex, where they are straightly produced in front; pronotum widely and irregularly expanded on each side, its margins with long spines, its anterior angles produced forwards slightly beyond the insertion of the antennæ, the lateral margins sinuate, the posterior angles elongately rounded, the posterior margin sinuately truncate; abdomen laterally expanded, four prominent lobes, the first short and subprominent, the second longer than first and apically truncate, the penultimate lobe longest, only moderately curved backward and broadly subtruncate apically; other characters generally as in *C. burmanicum*, Dist.

Length 9 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Allied to *C. burmanicum*, Dist. (vol. iv, p. 476), but differing by the structure of the penultimate abdominal segment, which is broader, less recurved, and more truncate outwardly.

3733. **Craspedum butleri**, sp. n.

Allied to the previous species, *C. campbelli*, but above with the pale ochraceous coloration largely suffused with greyish-white, especially on the anterior and posterior regions of the expanded pronotal lateral areas, of which the posterior angles are truncate and not elongately rounded as in *C. campbelli*, the first abdominal lobe is also much less prominent, and the small black abdominal dorsal spots a little more numerous; other characters as in *C. campbelli*.

Length 8 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **CLAVIGRALLA**. (Vol. I, p. 401.)

**CLAVIGRALLA GIBBOSA**. (Vol. I, p. 401.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **NEOHOPLOLOMIA**.

*Neohoplolomia*, *Dist. A. M. N. H.* (8) xii, p. 284 (1913).

Type, *N. typica*, Dist.

*Distribution.* Southern India.

Head about as long as the pronotum; antenniferous tubercles prominent, armed with an obscure short, outwardly and forwardly

directed spine; antennæ pilose, first joint stoutest, about equal in length to that of head, second distinctly shorter than third, a little shorter than first, fourth fusiform; rostrum reaching the intermediate coxæ, first joint extending to latitude of eyes, second to about base of head, second and third subequal in length; pronotum with the posterior margin truncate before scutellum, lateral margins finely spinose, basal angles acute; scutellum not elevated; connexivum not prominently spined, extending beyond corium and membrane from the region of base of posterior femora to apex; posterior femora with their bases slender, incrassated towards their apices, beneath which they are prominently spinous.

Allied to *Hoplolomia*, Stål (vol. i, p. 403), but differing by length of head and rostrum, and by the basal joint of antennæ not being shorter than head. Also allied to *Psilolomia*, Bredd.

3734. *Neohoplolomia typica*, *Dist. A. M. N. H.* (8) xii, p. 284 (1913).

Body above ochraceous, posterior area of pronotum and the clavus more or less suffused with castaneous; corium with obscure castaneous spots; apical joint of antennæ (excluding base), apical areas of posterior femora, apices of tibiæ, and transverse lines on connexivum, very dark castaneous or piceous; apex of rostrum and some small and inconstant spots on lateral areas

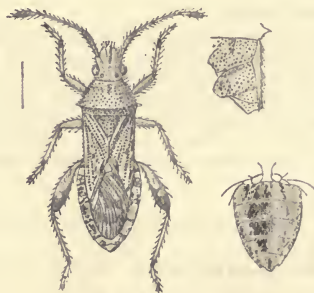


Fig. 76.—*Neohoplolomia typica*.

of abdomen beneath piceous or black; membrane pale brownish with obscure greyish spots; basal lateral angles of pronotum shortly but distinctly spined; head above with a pale central longitudinal fascia; pronotum somewhat coarsely punctate; scutellum with the basal angles and apex pale greyish and callose; other structural characters as in generic diagnosis.

Length 7–8 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **PSILOLOMIA.**

*Psilolomia*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 292 (1909).

Type, *P. brevitabilis*, Bredd.

*Distribution.* Ceylon.

This genus is evidently closely allied to the preceding genus, *Neohoplolomia*, Dist., but I have not seen an example, and am unable at the present time to see the type. Should it prove congeneric, which I cannot make it out to be from the description, Breddin's name would take precedence.

*PSILOLOMIA BREVITABILIS*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 293 (1909).

*Hab.* Ceylon; Trincomalee.

Genus **LEPTOCORISA.** (Vol. I, p. 409.)

*Leptocorixa*, *Bergr. J. Bomb. N. H. Soc.* xxiv, p. 173 (1915).

*LEPTOCORISA VARICORNIS.* (Vol. I, p. 409.)

*Lefroy*, "*Ind. Ins. Life*," p. 684 (1909); *Bain-Fletcher*, "*Some S. Ind. Ins.*" pp. 82, 146, 479 (1914).

*Leptocorixa varicornis*, *Bergr. J. Bomb. N. H. Soc.* xxiv, p. 173 (1915).

This insect is reported from India as living normally among grass and thick vegetation, but multiplying very largely in rice fields, and is one of the few seriously injurious Heteroptera.

*LEPTOCORISA ACUTA.* (Vol. I, p. 410.)

*Stebbing, Circ. Agricult. Econ. Ent.*, No. 1.

"When young this insect is most destructive, sucking out the juices of the stems of the rice plants." "Found all over the East on the rice plant" (*Oryza sativa*).

3735. *Leptocorisa lepida*, *Bredd. Ann. Soc. Ent. Belg.* liii, p. 293 (1909).

"Allied to *L. varicornis*, Fabr., but much smaller and more slender, the apex of the head between the conically pointed ends of the jugæ with very distinct and almost right-angled margins; the frontal forks sharp and distinct; antennæ pitchy-black, basal joint reddish-yellow or yellowish-brown, above darker, the slightly thickened apex pitchy-black, a broad subbasal ring on the fourth and the base of the third and second antennal joints whitish-yellow, a marginal spot on the anterior collar of the pronotum black; a small spot on the pronotal basal tubercles blackish, the black-punctured clavus and the inner part of the corium

infuscated, the inner angle of the hyaline membrane with a sharply defined blackish tint; the dorsal surface of the abdomen palely coloured; legs light yellowish, as also the underside of the body; the two apical joints of the tarsi, apices of tibiæ and often also the knee, very narrowly pitchy-black, sometimes the whole hind tibiæ infuscated."

Length 11–12½ millim.

*Hab.* Ceylon; Negombo (*vide* Breddin). North India; Dehra Dun (on grass); Allahabad Distr. Central India; Bhandara, Nandgaon.

Very closely allied to *L. varicornis*.

### Genus **ACESTRA**. (Vol IV, p. 478.)

**ACESTRA SINICA**. (Vol. IV, p. 479.)

Add: *Hab.* N. India; Dehra Dun.

### Genus **DACLERA**.

*Daclera*, *Sign. in Maillard, Not. Réunion, Ins.* p. 27 (1863); *Stål, En. Hem.* iii, pp. 91 & 95 (1873).

Type, *D. punctata*, Sign., from Bourbon Island.

*Distribution.* British India, Bourbon, Australia.

Head longer than breadth between eyes, gradually attenuated to apex, the apex of the apical lobe slightly prominent; ocelli prominent, but nearer to eyes than to each other; antennæ inserted nearer to eyes than to apex, first joint slightly shorter than head, second and third subequal in length, fourth longest; rostrum slightly extending beyond the intermediate coxæ, first joint not reaching base of head, second longer than first; pronotum about as long as head, a little narrowed anteriorly, the posterior lateral angles subnodulose; posterior femora strongly incrassated, shortly spinous beneath; posterior tibiæ distinctly curved, and with a short but distinct apical spine in the male.

Allied to *Tenosius* (vol. iv, p. 483).

### 3736. **Daclera levana**, sp. n.

Head, pronotum, scutellum and corium brownish-ochraceous, thickly, coarsely and darkly punctate; head with two lineate black marginal spots on central lobe before apex, followed to base by two more or less well-marked black central longitudinal stripes; antennæ dull castaneous; extreme apex of scutellum ochraceous; membrane bronzy, subhyaline; body beneath and legs in ♂ more or less castaneous-brown, abdomen beneath with a central, longitudinal, fasciate ochraceous line, and an ochraceous marginal spot on the three ultimate segments; in the ♀ the abdomen beneath is dull ochraceous, with black marginal spots on the

abdominal segments; connexivum (scarcely discernible in ♂) ochraceous, with elongate black spots; structural characters as in generic diagnosis.

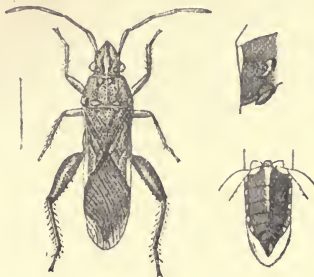


Fig. 77.—*Daclera levana*.

Length, ♂ 11; ♀ 12–13 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **EUTHETUS**. (Vol. I, p. 412 & Vol. IV, p. 481.)

3737. *Euthetus pulcherrimus*, *Bergr. Ann. Soc. Ent. Belg.* liii, p. 186 (1909).

Head, pronotum and scutellum black, the latter, when the tegmina are expanded, with the bases of the lateral margins whitish; antennæ in the three specimens now before me mutilated, but the basal joint ochraceous with the apex black, apical margin of the pronotum very narrowly, and sometimes a lateral spot to the margins of the head more or less ochraceous; pronotum with five indistinct longitudinal carinate lines, the central one broader and more distinct; corium black, its apex very pale ochraceous or greyish; membrane piceous; abdomen above sanguineous, the apical area black with two prominent and connected central greyish-white spots; connexivum black, with a longitudinal white spot near base; body beneath and legs as in *E. pulchellus*, Dall.

Length  $10\frac{1}{2}$ –11 millim.

*Hab.* Bombay (*Dixon*), Borghat.

*E. pulcherrimus* is closely allied to *E. pulchellus*, Dall. (vol. i, p. 413), and may be only a variety of that species. It is also allied to the African species *E. leucostictus*, Stål, as Bergroth states, which has been received from Socotra.

3738. *Euthetus khandalana*, sp. n.

Head, pronotum and scutellum black; pronotum with the anterior margin very narrowly, but containing a more distinct



central spot, pale ochraceous; corium black, the lateral areas broadly pale ochraceous, the apical margin basally greyish-white and apically black, membrane piceous; head beneath, rostrum and sternum black; the latter marked and the abdomen beneath as in *E. pulchellus*, Dall.; antennæ ochraceous, with the apices of the first and second joints black, and the third and fourth (except at bases) more fuscicent, basal joint a little shorter than head but longer than second, third and fourth longest and subequal in length; head distinctly, somewhat broadly, centrally, longitudinally incised on disk; pronotum thickly finely punctate, and with the five longitudinal lines as in *E. pulcherrimus*.

Length 10 millim.

*Hab.* Bombay Pres.; Khandala (*Dixon*).

This is another form or species allied to *E. pulchellus*, Dall., and *E. pulcherrimus*, Bergr., but only diverse by the distinct markings of the corium. However, if Bergroth's *pulcherrimus* has specific rank, *khandalana* must receive the same treatment.

### 3739. *Euthetus nigrellus*, sp. n.

♂. Head and pronotum ochraceous; head with two central black fasciæ behind ocelli, continued to apex in a single fascia, in ♀ not continued beyond ocelli; lateral margins behind eyes black; head beneath centrally black; antennæ with the first and fourth joints reddish-ochraceous, second and third stramineous, apices of the first, second and third joints black, fourth joint longest, second shortest; pronotum ochraceous, thickly punctate, two small central spots on anterior margin and four near posterior margin black; scutellum black, a central fascia and lateral margins reddish-ochraceous, apex broadly stramineous; corium black, the apical margin spotted with ochraceous; membrane piceous; sternum ochraceous, prosternum in ♂ distinctly spotted with black, meso- and metasterna in both sexes largely, laterally suffused with black; abdomen beneath ochraceous, centrally and laterally suffused with black, in ♂ much more strongly than in ♀; legs pale ochraceous; femora very finely spotted with testaceous, apically or subapically black preceded by a pale annulation, apices of tibiae and tarsi black; rostrum reaching the intermediate coxæ.

Length, ♂ 9; ♀ 10½ millim.

*Hab.* South India; Chikkaballapura and Mysore State (*T. V. Campbell*).

### 3740. *Euthetus fulvescens*, sp. n.

Head, pronotum, scutellum and corium stramineous, finely, thickly punctate, head with the eyes blackish, ocelli red, a black fasciate line from each ocellus to base; antennæ brownish-ochraceous, second joint shortest, fourth longest, third longer than first; scutellum with a central pale longitudinal fascia margined on each side with black; membrane subhyaline; body beneath and legs pale ochraceous, head beneath and sternum centrally



black or dark castaneous; rostrum ochraceous, when slightly passing the anterior coxæ; abdomen beneath centrally, basally and laterally mottled with sanguineous; abdomen above sanguineous; connexivum spotted with ochraceous; apices of tibiæ and tarsi black.

Length ♂ 9–10 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Allied to *E. singalensis*, Dist., but with the third joint of antennæ distinctly longer than the first.

3741. *Euthetus atomarius*, sp. n.

Head and pronotum stramineous, a double central longitudinal fascia not reaching apex, a central longitudinal fascia not reaching base of pronotum, and a spot behind each eye, fuscous or black; antennæ ochraceous, apices of first, second and third joints black, second shortest, third longer than first, fourth longest; scutellum blackish, the apex stramineous; corium stramineous, the clavus and interior area of corium blackish; membrane subhyaline, reflecting the dark abdomen beneath; body beneath and legs ochraceous; a spot on each side of anterior margin of prosternum, head beneath, meso- and metasterna (excluding margins), central and lateral suffusions on abdomen, and spots on connexivum, black; apices of femora, tibiæ and tarsi black, posterior femora with also a black subapical annulation.

Length 9–10 millim. (2 specs.).

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

The larger specimen is probably a ♀, but the abdomen is too mutilated for decisive opinion.

Genus **AKBARATUS**. (Vol. IV, p. 485.)

Male specimens recently received from South India enable me to add to the generic diagnosis.

♂. Femora gradually thickened from base to apex, considerably more so than in ♀, and not only finely spined beneath, but armed with a prominent long spine on inner side a little before apex.

**AKBARATUS FISHERI**. (Vol. IV, p. 486.)

♂. The spine on inner side of femora a little before apex is ochraceous with its apex black.

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

3742. *Akbaratus fasciatus*, sp. n.

Testaceous-brown; abdomen beneath with a longitudinal black submarginal fascia on each side and a marginal segmental series of black spots; head beneath and sternum more or less centrally black; legs brownish-ochraceous, with somewhat obscure and

irregular paler annulations; membrane bronzy-brown; antennæ brownish-ochraceous, the apical joint more piceous, first, second and third joints almost subequal in length, fourth joint considerably longest; rostrum testaceous-brown, basal joint very little shorter than the fourth; pronotum with the lateral margins moderately obliquely ridged, and with a central, obscure, longitudinal carina; posterior angles moderately angularly tuberculate; membrane scarcely passing abdominal apex; posterior femora very shortly and obscurely spined beneath in ♀, strongly so in ♂.

Length 11 millim.

*Hab.* South India; Chikkaballapura and Mysore State (*T. F. Campbell*).

**3743. Akbaratus fumosus, sp. n.**

Head, pronotum, scutellum and corium dull dark ochraceous, with dense, coarse, dark punctures; membrane bronzy-grey; body beneath dull ochraceous, lateral margins of head before insertion of antennæ black; a central black fascia on head and prosternum (on head not reaching apex), three central black fasciæ on mesosternum, lateral margins of abdomen with black linear markings; legs dull ochraceous, femora, excluding basal areas and inner margins of posterior tibiæ, infuscated; antennæ dull ochraceous, first joint a little longer than second or third, which are subequal in length, fourth longest; head above considerably shaded with black and with a pale, central, longitudinal smooth line; pronotum somewhat coarsely punctate, with a central longitudinal carinate line, the posterior lateral angles nodulose; posterior femora in ♂ shortly spined beneath, but with about three much longer spines on apical third, in ♀ more shortly and regularly spined, posterior tibiæ in ♂ distinctly inwardly spined on apical half, in ♀ less prominently so; membrane distinctly passing the abdominal apex.

Length ♂ & ♀  $10\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

The strongly spined inner margin of the posterior tibiæ is a principal character in this small species.

**Genus HYPSELOPUS.**

*Hypselopus*, *Burm. Handb.* ii, i, p. 328 (1835); *Stål, Hem. Afr.* ii, p. 98 (1865).

*Meloza*, *Amy. & Serv. Hist. des Hém.* p. 221 (1843).

Type, *H. gigas*, *Burm.*, an Ethiopian species.

*Distribution.* Ethiopian and Oriental Regions; also recorded from the Seychelle Islands, Mauritius, and Bourbon Island.

Body elongate; head triangular, porrect, large, the central lobe apically prominent; the antenniferous tubercles and the eyes also prominent; ocelli nearer eyes than to each other; rostrum reaching

or slightly passing the intermediate coxæ, basal joint not reaching base of head; corium with the apical angle long and narrowly produced; abdomen with the spiracles placed near lateral margins; posterior legs somewhat widely separated, the femora moderately incrassated, beneath more or less distinctly spinous; tibiæ straight, beyond middle spinous and with dense black pile.

3744. *Hypselopus pronotalis*, sp. n.

Head, pronotum, scutellum and corium fuscous-brown; pronotum with the lateral margins and four discal spots dark ochraceous; membrane brownish-grey; head beneath and sternum fuscous-brown, with thick, short, greyish pilosity; abdomen beneath ochraceous, with lateral, marginal, segmental black spots; legs brownish-ochraceous, posterior femora darker in hue, posterior tibiæ with nearly the basal halves paler and more ochraceous, the spines black; antennæ fuscous-brown, base



Fig. 78.—*Hypselopus pronotalis*.

of third and a broad annulation near base of fourth ochraceous, first joint considerably longer than second, which is longer than third, fourth longest; pronotum rugulose, with a distinct central longitudinal carination; scutellum elongately triangular; posterior tibiæ on nearly apical half longly darkly pilose and with fine spines, the apical one longest; tarsi finely pilose; membrane considerably extending beyond abdominal apex.

Length 19–21 millim.

*Hab.* Kumaon; Darmoti (*Dr. A. D. Imms*).

3745. *Hypselopus mimicus*, sp. n.

Head above black with an obscure central longitudinal testaceous fascia, ocelli red, head beneath testaceous; antennæ black, basal joint greyishly hirsute, basal annulation to third joint, and subbasal annulation and apex to fourth joint pale ochraceous or greyish-ochraceous, basal joint curved and moderately thickened, subequal in length to second, third joint a little shortest, fourth a little longest; pronotum black, thickly coarsely punctate, anterior marginal area testaceous, moderately gibbous and tuberculate, lateral margins and four discal spots (the two anterior ones smallest) greyish-white, a central longitudinal linear carination; scutellum blackish or dull testaceous, extreme apex greyish-white; corium blackish; membrane bronzy-black; body beneath (somewhat obscurely seen in carded specimens) with the head and sternum testaceous, basal margins of the sternal segments black, lateral margins of the prosternum broadly greyish-white; abdomen beneath pale dull ochraceous, stigmatal spots broadly black; legs blackish, posterior tibiæ on about apical halves longly pilose and spinous, the apical spine being specially long and prominent.

Length 17–20 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Allied to the preceding species, *H. pronotalis*, but apart from the different coloration of the pronotal markings, the relative lengths of the antennal joints are distinctive.

Genus *CORIZUS*. (Vol. I, p. 416.)

*CORIZUS RUBRICUNDUS*. (Vol. I, p. 417.)

Add: *Hab.* South India; Yercaud, Chikkaballapura, Nandidrug and Nilgiri Hills (*T. V. Campbell*).

3746. *Corizus parvipictus*, sp. n.

Head, pronotum and scutellum ochraceous, thickly rather coarsely punctate, eyes piceous, disk between eyes sometimes distinctly black, basal margin of pronotum and basal angles of scutellum more or less distinctly black, apical area of scutellum stramineous; corium subhyaline, somewhat coarsely punctate, somewhat distinctly tuberculate on apical area; tegmina pale hvaline; connexivum ochraceous, with large piceous segmental spots; body beneath and legs (imperfectly seen in carded specimens) ochraceous, a distinct dark linear submarginal fascia traversing sternum and abdomen on each side, lateral margins of abdomen with distinct small darker spots; legs indistinctly and irregularly darkly mottled or spotted, the femora more distinctly so; antennæ ochraceous, apices of the first, second and third joints distinctly infuscated, first joint not quite reaching apex of

head, second and third much longer than first and subequal in length, fourth longest and incrassated.

Length 5 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

**3747. *Corizus subfasciatus*, sp. n.**

Head, pronotum and scutellum dark ochraceous, thickly punctate; head with a central dark longitudinal fascia; pronotum with a central pale levigate longitudinal line, the basal margin and subtuberculate lateral angles black; scutellum with the basal angles black and each containing a pale ochraceous spot, the basal margin also narrowly black; corium pale dull ochraceous, with small obscure darker mottlings; membrane ochraceous, paler on apical area, where it reflects a short longitudinal black fascia on the abdomen beneath, apex considerably passing the abdominal apex; connexivum ochraceous, with prominent black segmental spots; body beneath and legs ochraceous, a narrow black central longitudinal fascia to head and large black central sternal spots, a much paler submarginal fascia traverses sternum and abdomen on each side; legs indistinctly spotted with fuscous; antennæ ochraceous, first, second and third joints with their apices piceous, second and third joints longer than first and subequal in length, fourth longest and incrassated.

Length 4 millim.

*Hab.* Ceylon; Peradeniya (*E. E. Green*).

**3748. *Corizus macropictus*, sp. n.**

Head, pronotum and scutellum ochraceous, darkly punctate; head with black margins to the ocelli, eyes black; pronotum with a broken submarginal anterior black line and four large black spots at basal margin, the lateral margins broadly impunctate; scutellum with conspicuous, dense, black punctures at each basal angle and there containing an elongate ochraceous spot, the apex pale stramineous; corium dull dark greyish, lateral margins narrowly ochraceous, an oblique, subquadrate, black-margined spot near each inner angle beyond clavus and a similar but more castaneous and more rounded spot at each apical angle; membrane hyaline, reflecting on apical area two black apical spots on the abdomen beneath; connexivum ochraceous, with large black segmental spots, each usually with a small ochraceous centre; body beneath and legs ochraceous, lateral marginal spots on abdomen black; antennæ ochraceous, first joint not quite reaching apex of head, much shorter than second or third, which are subequal in length, fourth much longest and subincrassate; membrane far exceeding abdominal apex.

Length  $5\frac{1}{2}$ –6 millim.

*Hab.* South India; Chikkaballapura and Nilgiri Hills (*T. V. Campbell*).



**3749. *Corizus multimaculatus*, sp. n.**

Ochraceous, with dense coarse, dark punctures; head with the eyes castaneous, ocelli black; pronotum with a central anterior marginal fascia and a posterior marginal fascia, including the lateral angles, black, a central longitudinal carinate line and the lateral impunctate marginal areas ochraceous; scutellum with a spot near basal angle and the apex pale ochraceous; corium with a subtuberculate spot near each inner angle, followed by a compressed subfoveate spot which is paler in hue; membrane hyaline, reflecting numerous pale ochraceous spots from the abdomen beneath; connexivum ochraceous, with black segmental spots; body beneath pale ochraceous; head beneath and sternum centrally black; abdomen with submarginal segmental pale and blackly margined spots, the lateral margins also stramineously spotted; antennæ with the basal joint black, moderately incrassated, remaining joints brownish-ochraceous, second and third much longer than first and subequal in length, fourth only a little longer than third and subincrassate; membrane moderately passing the abdominal apex.

Length  $6\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

**3750. *Corizus pronotalis*, sp. n.**

Head, pronotum and scutellum dull ochraceous, darkly punctate; pronotum with four small black spots near anterior margin, the lateral margins paler and impunctate, and with a central longitudinal carinate line; scutellum with the apex and a spot at each basal angle pale ochraceous; corium and membrane subhyaline; connexivum ochraceous, with black segmental spots; body beneath and legs reddish-ochraceous, the abdomen a little more brownish-ochraceous; antennæ dull ochraceous, basal joint not quite reaching apex of head, second slightly shorter than third, which again is slightly shorter than fourth; membrane moderately passing the abdominal apex.

Length 6 millim.

*Hab.* North India; Dehra Dun (on grass—*Dr. A. D. Imms*).

**3751. *Corizus imperialis*, sp. n.**

Body above and beneath, legs and antennæ purplish-red; ocelli black; pronotum with the lateral margins and a central carinate line ochraceous, and before the anterior margin a transverse black line; scutellum with a spot near each basal angle and the apex paler and more ochraceous; antennæ dark purplish-red, second and third joints almost subequal in length, fourth joint mutilated.

Length 6 millim.

*Hab.* Bombay (*Dixon*).



Genus **AGRAPHOPUS.**

*Agraphopus*, Stål, *Öfv. Vet.-Ak. Förh.* 1872, No. 6, pp. 55-56;  
*Puton, Synops.* 2, p. 109 (1881).

*Leptoceraea*, Jak. *Troud. Ent. Ross.* vii, p. 39 (1874).

Type, *A. lethierryi*, Stål.

*Distribution.* Palæarctic, Ethiopian, and Oriental Regions.

Antenniferous tubercles apically truncate, the apical angles somewhat obtuse; head slightly longer than the pronotum and apically produced; antennæ slender, first joint about reaching apex of head, fourth joint shorter than third and incrassate; pronotum transverse, apically truncate, the posterior lateral angles obtuse, not rounded; scutellum with the apex narrowly rounded; corium pellucid, impunctate (or very finely and obscurely punctate); legs slender; body narrow, depressed. (Stål.)

3752. *Agraphopus lethierryi*, Stål, *Öfv. Vet.-Ak. Förh.* 1872, No. 6, p. 56; *Puton, Synops.* 2, p. 118 (1881); *Oshan. Verz. Pal. Hem.* i, p. 231 (1906).

Pale stramineous, obscurely subpubescent; pronotum, scutellum and sternum darkly punctate; body above, excepting lateral margins of pronotum and corium, and a central longitudinal line

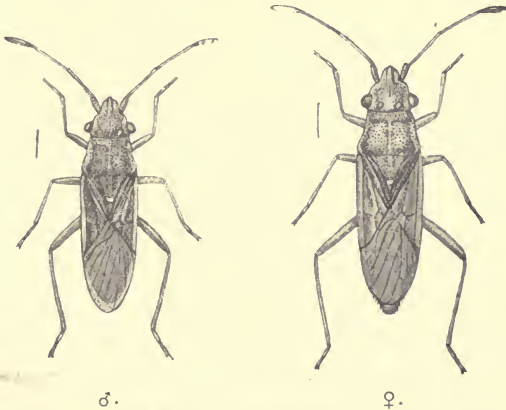


Fig. 79.—*Agraphopus lethierryi*.

on pronotum and scutellum, infuscated; apex of scutellum albescent; apical joint of the antennæ infuscated or sometimes almost black; in some specimens a small dark spot at apical angle of corium.

Length  $4\frac{1}{2}$ – $5\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*). Also found throughout the whole of the Palæarctic Region.

Male specimens which I have examined appear to be smaller and darker than the other sex.

**3753. *Agrophopus orientalis*, sp. n.**

Head, pronotum and scutellum pale virescent; lateral margins of pronotum—narrow on anterior half, broadly on posterior half—very pale stramineous, apex of scutellum albescent; pronotum and scutellum traversed by a longitudinal, central, linear carination; corium pellucid, the veins and margins dull stramineous, the apical angle distinctly darker; membrane pale hyaline; body beneath virescent; legs pale luteous, apices of the tibiæ black; antennæ with the first, second and third joints pale luteous, fourth joint black, its extreme base luteous, second and third joints almost subequal in length, the second slightly longest; head, pronotum and scutellum finely and somewhat obscurely punctate; lateral posterior pronotal angles thickened, but somewhat obscurely tuberculate; posterior femora only moderately dilated and very obscurely spinous beneath.

Length 5–5½ millim.

*Hab.* North Bengal; Purneah District (*C. A. Paiva*), Pusa (*Bainbrigge-Fletcher*).

Genus **SERINETHA**. (Vol. I, p. 418.)

**SERINETHA ABDOMINALIS** (Vol. I, p. 419), *var.*

In colour above resembling the var. *taprobanensis*, but differing in the abdomen beneath being totally pale ochraceous

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Genus **THERAPHA**.

*Therapha*, *Amy. & Serv. Hém.* p. 244 (1843).

*Consivius*, *Dist.* (vol. v, p. 11).

**THERAPHA HYOSCYAMI**, *Linn. (Cimex) Syst. Nat.* ed. x, p. 447 (1760); *Oshan. Verz. Pal. Hem. Het.* Bd. i, p. 218 (1906).

*Consivius collinus*, *Dist.* (vol. v, p. 11).

*Hab.* Simla Hills. Throughout the Palæarctic Region.

**3754. *Therapha diluta*, sp. n.**

Dull, dark ochraceous, more or less thickly, coarsely punctate; margins of ocelli, inner margins of eyes, narrow basal margin of head, and the antennæ black, third antennal joint brownish with the base black; pronotum with the subanterior margin—medially, narrowly broken—and four oblique spots at basal margin, black; base of scutellum, clavus, two prominent spots on subclaval area, and a cluster of three rounded spots near

posterior margin of corium, black; membrane bronzy hyaline, narrowly black at base and near each apical area of the corium; body beneath and legs ochraceous; apices of tibiæ and tarsi—more or less—black; antennæ with the second and third joints subequal in length, apical joint distinctly thickened.

Length 9 millim.

*Hab.* N. India; Kumaon, Shamkhet.

Allied to *T. hyoscymæ*, Linn., but with the apical joint of the antennæ shorter and more distinctly thickened, second and third joints almost subequal in length; the black markings of the under surface in *T. hyoscymæ* practically absent in *T. diluta*; markings above different.

## Family BERYTIDÆ.

(Vol. I, p. 421 & Vol. IV, p. 487.)

### Genus TAPROBANUS.

*Taprobanus*, *Dist. Entomologist*, xliv, pp. 24 & 105 (1911).

Type, *T. gravelyi*, *Dist.*

*Distribution.* Ceylon.

Body long and narrow; posterior femora passing apex of abdomen; hemelytra shorter than abdomen; head longer than broad, deflected and narrowed anteriorly, moderately globose; ocelli at a short distance from base, nearer lateral margins than to each other; eyes about midway from base to apex; antennæ with the first joint longest, a little shorter than the body, its apex slightly incrassated, second a little longer than third, fourth short and moderately incrassated; pronotum about one and a half times as long as head, distinctly transversely impressed and narrowed at about one-third from anterior margin, remaining two-thirds moderately convex and distinctly declivous from base, the lateral margins a little rounded, basal margin truncate, anterior margin moderately convex; scutellum longer than broad; hemelytra extending to about the base of the penultimate abdominal segment; a curved, upwardly directed, slender process on each side of the sternum, between the intermediate and posterior coxæ; rostrum reaching the posterior coxæ, basal joint stoutest and reaching middle of head; legs long and slender, femora incrassated at apices, anterior legs with the tibiæ about as long as the femora, intermediate and posterior legs with the tibiæ distinctly longer than femora.

3755. *Taprobanus gravelyi*, *Dist. Entomologist*, xliv, p. 25 (1911).

Shining ochraceous; apical joint of antennæ black, its apex greyish-white; head smooth, glabrous; eyes black; pronotum thickly, coarsely punctate, the anterior area elevated, depressed

anteriorly, a little nodulose at middle of anterior margin, basal margin narrowly laminate; hemelytra pale ochraceous, the corium a little darker; femora finely spotted with black, the incrassated apices pale testaceous or sanguineous, tibiæ and tarsi fuscous.



Fig. 80.—*Taprobanus gravelyi*.

Length 7–8 millim.

*Hab.* Ceylon; Peradeniya (*F. H. Gravelly*). South India; Nandidrug (*T. V. Campbell*). North India; Dehra Dun, Surajbagh (*Dr. A. D. Imms*).

#### Genus **ITERDUCA**, nov.

Type, *I. prima*, Dist.

*Distribution.* South India.

Allied to *Taprobanus*, and differing principally by the shape and size of the scutellum, which is much longer than broad, the posterior angle being long and narrow; hemelytra not, or very slightly shorter than the abdomen; antennæ with the first joint much shorter than the body; pronotum twice as long as broad. A curved, upwardly directed slender process on each side of the sternum between the intermediate and posterior coxæ as in *Taprobanus*.

#### 3756. *Iterduca prima*, sp. n.

Pale ochraceous, the membrane hyaline; antennæ ochraceous, first joint considerably shorter than the body, longer than the second joint, which is almost subequal in length to the third,

fourth joint short, thickened, black, with its apex ochraceous; pronotum about twice as long as broad, thickly, finely punctate, before middle transversely callose, and thence centrally longitudinally carinate, basal margin usually darker as in figure;

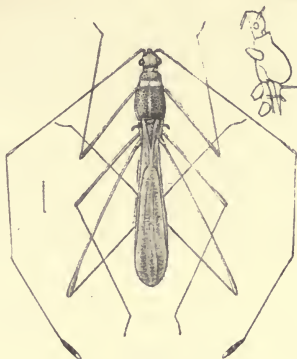


Fig. 81.—*Iterduca prima*.

scutellum a little gibbous at base; legs ochraceous, femora with their incrassated apices darker, those of the anterior femora darkest; tarsi with their apical areas black or blackish.

Length 5-5½ millim.

*Hab.* South India; Chikkaballapura and Nandidrug (*T. V. Campbell*).

### Genus MEGALOMERIUM

*Megalomerium*, *Fieb. Wien. Ent. Mon.* 1854, p. 208; *Eur. Hem.* pp. 54 & 213 (1861); *Oshan. Verz. Pal. Hem.* i, p. 242 (1906-9).

*Metacanthus*, *Costa, Cim. Regni Neap.* Cent. 1, p. 27 (1838).

*Megalomerium*? *Bredd. Deutsch. Ent. Zeitschr.* 1907, p. 37.

Type, *M. meridionale*, *Costa*, a Palearctic species.

*Distribution.* Palearctic and Oriental Regions.

Head longer than broad, the apex moderately subacutely produced, considerably longer in front of eyes than behind eyes to base; antennæ slender, first joint longest and very slightly thickened at apex, second and third joints subequal in length, fourth short and distinctly incrassated; pronotum long, twice as long as greatest breadth, with a long distinct anterior narrow collar, gradually subconvexly widened to base, the basal margin very slightly emarginate, the posterior two-thirds moderately convex and with a distinct, central, longitudinal ridge; scutellum

elongate and slightly excavate; hemelytra almost reaching abdominal apex; a curved upwardly directed slender process on each side of the sternum between the intermediate and posterior coxæ; legs long and slender, the apical areas of the femora moderately thickened.

Allied to the two preceding genera *Taprobanus* and *Iterduca*, but differing principally by the long pronotum and the strongly produced anterior collar to the same. In the above diagnosis I have taken the characters from the following Oriental species, in which the apical areas of the femora are much less incrassated than in the type of the genus.

3757. *Megalomerium pertenerum*, Bredd. (*Megalomerium*?) *Deutsch. Ent. Zeitschr.* 1907, p. 37.

Pale ochraceous, the head and long anterior collar to the pronotum a little darker ochraceous; antennæ pale ochraceous, the apical joint black with its apex greyish-white; pronotum



Fig. 82.—*Megalomerium pertenerum*.

(excluding collar) thickly punctate, the central longitudinal carination and the basal margin impunctate, just before basal margin obliquely depressed; clavus obscurely punctate; apical areas of the femora and tarsi a little darker.

Length, ♂ 5, ♀ 7 millim.

*Hab.* Ceylon; Negombo (*vide* Breddin). South India; Kodaikanal, Chikkaballapura, and Nilgiri Hills (*T. V. Campbell*). Simla (*N. Annandale*).

From the Palæarctic species *M. meridionale*, Costa, this species differs strongly in the much less incrassated apices of the femora.



Genus **CAPYS**. (Vol. IV, p. 489.)

Some amount of conjecture has been formulated by Bergroth in relation to the generic name *Capys* as here used. In 1907 Breddin proposed a new genus *Capyella*, which Bergroth correctly surmised was only a synonym of *Capys*, Stål (1865). The name *Capys*, however, was also used in the same year by Hewitson for a genus of Lycænidæ. Bergroth states that Hewitson's name was published a little earlier than Stål's and that, therefore, *Capyella*, Bredd., could be used as a new name, but he does not give us any particulars as to the respective dates of publication, though probably he has some information that is neither known in Stockholm nor London where these names were proposed, and where I have sought—unsuccessfully—to discover exact dates of publication beyond that of the same year. I therefore do not consider that Bergroth is justified in this alteration, and I do not follow him.

*CAPYS MALACAIPUS* (Vol. IV, p. 490); *Dist. Entomologist*, xliv, p. 25 (1911).

*Capyella horni*, *Bredd. Deutsch. Ent. Zeitschr.* 1907, p. 37.

3758. *Capys gracilis*, *Dist. Entomologist*, xliv, p. 213 (1911).

♂. Head ochraceous, the lateral margins behind eyes and a somewhat circular series of coarse punctures at base, enclosing ocelli, black; pronotum with the anterior area ochraceous, remainder thickly blackly punctate, with the margins and a central line ochraceous; scutellum blackly punctate; corium ochraceous, with dense, fine, black punctures; membrane greyish-brown with scattered blackish markings; connexivum ochraceous with elongate black spots; body beneath black, abdomen with lateral marginal, elongate, ochraceous spots; coxæ ochraceous; antennæ with the first and second joints ochraceous, finely speckled with black, fourth joint black, first joint more than twice as long as second, subequal in length to third, apex of first joint distinctly incrassate, fourth short and moderately thickened; head between antennæ armed with a moderately long, curved, spiniform porrect process; pronotum longer than broad, elongate, only moderately widened posteriorly; membrane reaching apex of abdomen; rostrum about reaching posterior coxæ, its apical joint black.

♀ Abdomen beneath testaceous; membrane not reaching apex of abdomen.

Length  $6\frac{1}{2}$ –7 millim.

*Hab.* Trichinopoly.

Differs from *C. malacaipus*, Stål, by the slightly shorter and somewhat more robust spiniform process to the head, the

narrower pronotum, and the shorter and more thickened apical joint to the antennæ. Dr. Montandon kindly forwarded me this species.

Genus **METACANTHUS**. (Vol. I, p. 422.)

**METACANTHUS PULCHELLUS**. (Vol. I, p. 423, fig. 248.)

Add: *Hab.* Ceylon; Peradeniya (*E. E. Green*).

3759. **Metacanthus bihamatus**, *Dist. Ann. Soc. Ent. Belg.* liii, p. 360 (1909); *Entomologist*, xlv, p. 105, fig. (1911).

Pronotum and sternum pale ochraceous; head and a tuberculous spot at each basal angle of the pronotum shining black; abdomen beneath, legs, rostrum and antennæ stramineous; numerous annulations to legs and antennæ, and apex of rostrum black; first joint of antennæ about as long as anterior tibæ and tarsi, its apex moderately clavate, second about two-thirds the length of first and subequal to third; rostrum reaching the posterior coxæ, first joint about reaching the anterior coxæ; pronotum with a distinct anterior collar, at the base of which is a long curved spine on each side, disk of pronotum convexly raised, finely punctate, with a somewhat obscure central longitudinal ridge, and a central small tubercle between the black tuberculous spots; scutellum with a short (in typical specimen probably mutilated) subbasal spine; hemelytra pale shining hyaline, membrane with an iridescent tint and considerably extending beyond abdominal apex.

Length 4 millim.

*Hab.* Ceylon (*Green*). South India; Chikkaballapura (*T. F. Campbell*).

A very distinct species; the long curved spines to the pronotum suggest a subgeneric division.

Genus **HUBERTIELLA**, (Vol. I, p. 423.)

**HUBERTIELLA CARDAMOMI**. (Vol. I, p. 424.)

Add: *Hab.* South India; Chikkaballapura, Nilgiri Hills (*T. F. Campbell*).

*Var.* *Dist.* 'Entomologist,' xlv, p. 269 (1911).

Since I previously referred to this species (*supra*), Mr. E. E. Green has sent me varietal specimens in which the two dark spots on the posterior pronotal lobe are almost or entirely obliterated. These specimens were taken from *Strobilanthus*, so that the species is seen to be not entirely confined to *Elettaria cardamomum*.

## Family LYGÆIDÆ.

(Vol. II, p. 1 &amp; Vol. V, p. 1.)

Genus **LYGÆUS**. (Vol. II, p. 5 & Vol. V, p. 4.)3760. *Lygæus campbelli*, sp. nov.

Head, pronotum, corium and body beneath sanguineous; apex and an inner lateral fascia on head (the latter scarcely extending beyond eyes), a broad anterior margin, two large oblong spots and narrow lateral margins on pronotum, scutellum, irregular claval and apical margins, a discal rounded spot, and narrow posterior costal margin to corium, membrane, central longitudinal fascia on head beneath, sternum—exhibiting a large sanguineous spot near each coxa, and a narrow prosternal lateral margin,—a series of transverse segmental spots at each lateral abdominal margin, the apical segment, legs, rostrum and antennæ, black; antennæ with the second and fourth joints subequal in length, third longer than first; lateral margins of the pronotum ampliate and rounded, narrowed and concave on apical third; legs obscurely greyishly pilose; rostrum about reaching the intermediate coxæ.

Length 9–10 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).To be placed near *L. simla*, Dist. (vol. v, p. 5).3761. *Lygæus incertus*, *Walk. Cat. Het.* v. p. 64 (1872).

Head, pronotum and corium sanguineous; antennæ, a transverse spot at base of head, two large basally connected spots on basal area of pronotum, scutellum and membrane, black; body beneath sanguineous, a rounded spot near lateral margin of each sternal segment, apical abdominal segment, legs and the rostrum, black; second joint of antennæ considerably longer than the third; pronotum with a moderate discal linear impression before middle; scutellum distinctly longitudinally carinate from about middle to apex; rostrum scarcely passing the intermediate coxæ; legs with short, obscure, greyish pilosity.

Length 10 millim.

*Hab.* Sikkim; Kurseong.

Walker's type is unlocalised and also in poor condition. It was from Vigor's collection. The Bengal specimen was kindly sent to me by Dr. Montandon.

Genus **GRAPTOSTETHUS**. (Vol. II, p. 8.)**GRAPTOSTETHUS SERVUS**. (Vol. II, p. 8.)

Add: *Hab.* North India; Dehra Dun, Sondad, Surajbagh (*Dr. A. D. Imms*).

Genus **ASPILOCORYPHUS**. (Vol. II, p. 11 & Vol. V, p. 8.)

3762. **Aspilocoryphus fraternus**, sp. n.

Head, pronotum and scutellum black; head with a central spot at basal margin, pronotum with the lateral margins and a central longitudinal fascia, and the apex of scutellum, sanguineous; corium piceous with sanguineous suffusions, the lateral margins more distinctly of that colour; membrane hyaline, reflecting the dark abdomen beneath, and with a small oblique, transverse white spot near base; body beneath imperfectly seen in carded specimens, but apparently sanguineous, sternum laterally spotted with black on the segments; legs with the femora piceous, the tibiæ and tarsi more fuscous-brown; antennæ black, second and fourth joints subequal in length; pronotum transversely impressed at about two-thirds from base; connexivum pale sanguineous, spotted with black; tibiæ distinctly finely pilose.

Length  $4\frac{1}{2}$ –5 millim.

*Hab.* South India; Nandidrug (*T. V. Campbell*).

Allied to *A. guttiger* (vol. ii, p. 11) but a much smaller insect, with the second joint of the antennæ shorter than in that species.

3763. **Aspilocoryphus signatus**, sp. n.

Head and pronotum dull brownish-ochraceous, pronotum with more than half the area from base black; scutellum black, with the apex and a central ridge ochraceous; corium ochraceous with piceous suffusions, and with a prominent oblique black spot near middle; membrane black, with a greyish-white spot near base and the apical margin narrowly of the same colour; femora black, their apices more ochraceous, tibiæ and tarsi ochraceous, the apices of both a little darker; body beneath piceous, the sternum and lateral margins of abdomen more brownish-ochraceous; antennæ with the first, second and third joints ochraceous, apical joint black and almost subequal in length with second joint; pronotum with two transverse carinations, connected laterally and centrally.

Length 6 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **MELANOTELUS**. (Vol. II, p. 12.)

**MELANOTELUS BIPUNCTATUS**. (Vol. II, p. 12.)

Add: *Hab.* Ceylon; Hambantota (*J. C. F. Fryer*).

3764. **Melanotelus sordidus**, sp. n.

Head and pronotum testaceous; head with the antennæ, eyes and area of ocelli black; pronotum with two large, transverse and contiguous black spots near basal margin; scutellum piceous,

the apex and a central longitudinal carination testaceous; corium piceous, the veins paler in coloration, the basal lateral margin testaceous, the apical margin greyish; membrane black, its apical margin greyish; sternum testaceous; abdomen beneath and legs piceous; second and fourth joints of antennæ subequal in length. Length 4 millim.

*Hab.* South India; Nandidrug (*T. V. Campbell*).

Genus **LYGÆOSOMA**. (Vol. II, p. 13 & Vol. V, p. 9.)

3765. **Lygæosoma contaminatum**, sp. n.

Head black, the apex ochraceous; pronotum ochraceous, the anterior and posterior margins narrowly black; scutellum piceous or black, narrow lateral margins and apex ochraceous, corium piceous, the basal angle, venation and apical angle ochraceous or pale testaceous; membrane black, apical marginal area hyaline; connexivum ochraceous, spotted with black; body beneath and legs ochraceous, femora (excluding apices) more or less piceous; antennæ pale piceous, second and third joints subequal in length, fourth distinctly thickened; head triangular, the apex acuminate; pronotum distinctly transversely impressed at about one-third from apex; scutellum with the apex subacute.

Length 3 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **CÆNOCORIS**. (Vol. II, p. 16 & Vol. V, p. 12.)

3766. **Cænocoris sanguinarius**, *Stål*, *Öfv. Vet.-Ak. Förh.* 1870, p. 660.

Sanguineous; antennæ (excluding base of first joint), a submarginal spot or fascia before anterior margin of pronotum, basal area—more or less—of scutellum, membrane (excluding apical margin), a more or less distinct series of transverse, sublateral, segmental spots to abdomen beneath, rostrum and legs, black; there are also usually large black segmental spots to the sternum, but these are inconstant; rostrum reaching the middle of the second abdominal segment, sometimes considerably longer; anterior femora with a short spine beneath near apex; apical joint of the antennæ considerably the longest.

Length  $12\frac{1}{2}$ –17 millim.

*Hab.* Ceylon; Peradeniya (*E. E. Green*). South India; Nandidrug (*T. V. Campbell*).—Sumatra; Celebes; Philippines.

Genus **NYSIUS**. (Vol. II, p. 17 & Vol. V, p. 13.)

**NYSIUS CEYLANICUS**. (Vol. II, p. 18.)

Add: *Hab.* South India; Mysore State (*T. V. Campbell*).

*NYSIUS INCONSPICUUS*. (Vol. II, p. 18.)

Add: *Hab.* South India; Mysore State (*T. V. Campbell*).

*NYSIUS LACUSTRINUS*. (Vol. V, p. 13.)

Add: *Hab.* South India: Mysore State (*T. V. Campbell*).

*NYSIUS MELANICUS*. (Vol. V, p. 14.)

Add: *Hab.* South India; Kodaikanal (*T. V. Campbell*).

Genus **NYSIODES**, nov.

Type, *N. typus*, Dist.

*Distribution.* South India.

Head about as long as breadth between eyes; antennæ with the basal joint short and robust, about as long as or only a little shorter than the third joint, fourth joint very long, as long as second and third together; pronotum elongate, about as long as breadth between the basal angles, which are subprominent, the anterior margin scarcely more than half the breadth of the posterior margin; scutellum at base much broader than long, the margins carinate; membrane considerably passing the abdominal apex; legs moderately long and slender.

This genus is allied to *Nysius*, from which the elongate pronotum distinguishes it; the length of the apical joint of the antennæ allies it with *Cænocoris*.



Fig. 83.--*Nysiodes typus*.

3767. *Nysiodes typus*, sp. n.

Head, pronotum and scutellum pale ochraceous, thickly, somewhat coarsely punctate; corium paler ochraceous, the clavus with darker suffusions on its apical area, the apical margins of the



corium also darker; membrane hyaline with some central longitudinal darker suffusions; body beneath brownish-ochraceous, punctate, the anterior margin of the prosternum, narrow posterior margins of pro-, meso- and metasternum, coxal spots, and submarginal abdominal spots pale levigate; femora ochraceous, tibiæ and tarsi paler, apices of tarsi black; pronotum transversely impressed before middle, both head and pronotum longitudinally tricarinate; scutellum subglobose; antennæ with the second joint longer than third, fourth about as long as second and third together.

Length 5 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

3768. *Nysiodes faustus*, sp. n.

Head, pronotum and scutellum either piceous with pale suffusions or pale ochraceous with piceous suffusions; antennæ ochraceous, basal and apical joints usually darker in hue; apex of scutellum narrowly pale ochraceous; corium pale greyish or ochraceous, darker on apical claval area, the venation and apical margin also distinctly darker; membrane subhyaline, with longitudinal darker suffusions; body beneath piceous or testaceous, abdomen with a sublateral and central longitudinal black maculate fascia; tibiæ usually paler in hue than the femora.

Length 5–5½ millim.

*Hab.* South India; Chikkaballapura and Mysore State (*T. V. Campbell*).

This species conforms in the shape and length of the pronotum and scutellum to the typical form of the genus, but differs in the length of the apical joint of the antennæ, which is not longer than the second joint.

Genus **NINUS**. (Vol. II, p. 19 & Vol. V, p. 15.)

*NINUS INSIGNIS*, *Stål*, *Freg. Eug. Resa, Hem.* p. 253, t. iii, f. 5 (1859).

*Ninus singalensis*, *Bredd. Deutsch. Ent. Zeitschr.* 1907, p. 39; *Dist. Faun. Brit. Ind., Rhyn.* v, p. 15 (1910).

Add: *Hab.* Ceylon; Peradeniya (*E. E. Green*). Calcutta (*Ind. Mus.*). Marianne Islands, Guam (*fide Stål*).

Genus **CYMUS**. (Vol. II, p. 21 & Vol. V, p. 16.)

*CYMUS TABIDUS*. (Vol. II, p. 21.)

? *Cymus nanulus*, *Bredd. Deutsch. Ent. Zeitschr.* 1907, p. 38. (Vol. V, p. 16.)

Add: *Hab.* Ceylon; Peradeniya (*E. E. Green*). South India; Chikkaballapura (*T. V. Campbell*).

Breddin seems to have founded his species on a very small

specimen ( $2\frac{2}{3}$  millim.) from Ceylon, and from this island I have now specimens before me measuring  $3\frac{1}{2}$  millim., while some specimens collected by Dr. Campbell at Chikkaballapura do not reach a length of 3 millim.

Genus **DOMIDUCA**, nov.

Type, *D. exemplificata*, Dist.

*Distribution.* South India.

Head scarcely longer than breadth between eyes, the central lobe subacutely projecting; antennæ with the first joint robust, about reaching apex of head, second and third joints slender, fourth joint moderately incrassated; rostrum not quite reaching the posterior coxæ; pronotum about two-thirds as long as the basal breadth, the anterior margin about half the breadth at base, the lateral margins moderately convex; scutellum with a transverse concave carination near base, from which a central longitudinal carination is continued to apex; corium finely punctate, the clavus thickly coarsely punctate, the lateral marginal areas broad; membrane hyaline, far exceeding the abdominal apex.

3769. *Domiduca exemplificata*, sp. n.

Head, pronotum, scutellum, body beneath and legs brownish-ochraceous, the carinations on the scutellum paler in hue; corium a little paler, especially the lateral marginal areas, the apical angles of a more testaceous hue; tegmina pale hyaline; antennæ

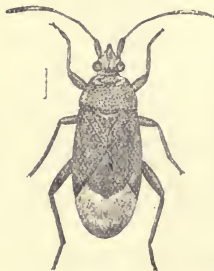


Fig. 84.—*Domiduca exemplificata*.

ochraceous, first joint about reaching apex of head, second a little shorter than third, fourth nearly as long as second and third together, moderately incrassate and with a subcentral paler annulation; pronotum thickly punctate, the corium more finely and

thickly punctate; scutellum and clavus coarsely punctate, the carinations on the former impunctate.

Length 5 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **OSSIPAGA**, nov.

Type, *O. ceylanica*, Dist.

*Distribution.* Ceylon.

Head nearly twice as broad as long, apex of the central lobe somewhat acutely produced, eyes moderately stylated and directed both a little forwardly and upwardly; ocelli prominent, placed near base; antennæ pilose, basal joint scarcely reaching apex of head, second and fourth joints subequal in length, each a little longer than third; rostrum about reaching the intermediate coxæ; pronotum almost as broad as long at base, anterior margin truncate, a little more than half the basal breadth, the lateral angles subprominent; scutellum small, triangular; corium with the lateral margins strongly sinuate, concave near base, convex towards apex; membrane passing the abdominal apex; legs pilose.

3770. *Ossipaga ceylanica*, sp. n.

Head and anterior area of pronotum dark brownish-ochraceous, remaining pronotal area and scutellum pale ochraceous; corium semi-hyaline, a costal central marginal spot and the apical margin



Fig. 85.—*Ossipaga ceylanica*.

dark brownish-ochraceous; membrane hyaline, with some darker macular suffusions and reflecting the dark abdomen beneath; head beneath and prosternum dark brownish-ochraceous; abdomen and legs paler in hue, femora darker; head, pronotum and

scutellum somewhat thickly darkly punctate; margins of clavus darkly punctate; other structural characters as in generic diagnosis.

Length 4-4½ millim.

*Hab.* Ceylon; Peradeniya (*J. C. F. Fryer*).

Genus **MACROPES**. (Vol. II, p. 24 & Vol. V, p. 17.)

**MACROPES DILUTUS**. (Vol. II, p. 25 & Vol. V, p. 17.)

Add: *Hab.* South India; Kodaikanal (*T. V. Campbell*).

**3771. *Macropes femoralis*, sp. n.**

Head, antennæ, pronotum, scutellum, body beneath and femora, black; tibiæ and tarsi brownish-ochraceous; corium very pale ochraceous; membrane subhyaline; second and third joints of antennæ subequal in length, each shorter than fourth; pronotum transversely impressed behind middle, the anterior lobe with a moderate central, longitudinal sulcate impression, the basal margin distinctly ridged; scutellum centrally, longitudinally carinate for a short distance from base to apex; anterior femora very strongly thickened and somewhat coarsely spined beneath; membrane not passing abdominal apex.

Length 4 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

**3772. *Macropes consobrinus*, sp. n.**

Head, antennæ, pronotum, scutellum, body beneath, femora and tibiæ black, the tarsi pale ochraceous; corium pale ochraceous; membrane subhyaline.

Allied to the preceding species, *M. femoralis*, but more elongate, the membrane not nearly reaching the abdominal apex; femora and tibiæ concolorous; anterior femora much less robust; scutellum with a very strong, central, longitudinal carina.

Length 5 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

**3773. *Macropes pronotalis*, sp. n.**

Head and anterior two-thirds of pronotum black; basal area of pronotum, scutellum and corium pale ochraceous; head beneath, antennæ, rostrum, pronotum and metasternum black; posterior area of prosternum, coxæ, legs and abdomen beneath, ochraceous; antennæ with the second and fourth joints subequal in length, each a little longer than third; pronotum with the anterior area distinctly, centrally, longitudinally sulcate, posterior area thickly punctate; scutellum centrally, finely, longitudinally carinate; membrane not reaching the apex of abdomen in either sex.

Length 6-7 millim.

*Hab.* W. Bengal; Paresnath (*N. Annandale*).

3774. *Macropes rufipes*, *Dist. Entomologist*, xliv, p. 105 (1911).

Head, pronotum and scutellum black; corium ochraceous, more or less streaked with piceous; membrane very pale ochraceous with the veins darker; body beneath black, the legs reddish-ochraceous; antennæ black, the first, second and third joints more or less ochraceous, the apices of the second and third joints distinctly clavate and black at apices; pronotum broadly, distinctly, transversely impressed a little before base, before this a little convex and irregularly impressed, the lateral margins moderately rounded, the basal margin moderately concave, the whole very finely punctate; membrane extending to a little beyond the middle of the abdomen, connexivum dull ochraceous; abdomen above black, finely ochraceously pilose; body beneath black, very finely ochraceously pilose.

Length 7-8 millim.

*Hab.* Sikkim; Kurseong.

Allied to *M. punctipes*, Walk., but differing by the pronotum being less deeply concave at the posterior margin; the second and third joints of antennæ distinctly clavate at their apices; different colour of the legs, etc.

We are indebted to Dr. Montandon for specimens of this species.

3775. *Macropes consimilis*, sp. n.

Head, pronotum, scutellum and body beneath black; femora black, their apices and the tibiæ and tarsi ochraceous; corium and membrane pale ochraceous, the apical margin of the former piceous; antennæ with the first and second joints ochraceous, third and fourth black; pronotum with the anterior half convex and sparsely, finely punctate, basal half flattened, thickly finely punctate, the basal margin a little gibbous and almost impunctate; membrane not quite reaching the abdominal apex; anterior femora strongly incrassated and strongly spined beneath.

Length 7 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

3776. *Macropes abbreviatus*, sp. n.

Head, antennæ, pronotum, scutellum, head beneath and sternum jet-black; abdomen above and beneath piceous-brown; corium piceous, the veins ochraceous; membrane dark hyaline; rostrum and legs dull sanguineous; basal joint of antennæ castaneous, second and fourth joints subequal in length, each a little longer than third; pronotum with the lateral margins convex near middle, basal area compressed, thickly coarsely punctate, extreme basal margin impunctate; corium and membrane very short, scarcely extending beyond base of first abdominal segment.

Length  $5\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Genus **BLISSUS**. (Vol. II, p. 28.)3777. **Blissus latus**, sp. n.

*Immature form.* Allied to *B. gibbus*, Fabr., of which the immature form is figured (vol. ii, p. 28, fig. 20), but a shorter and more robust species; the pronotum slightly shorter and considerably more convex; the corium and membrane much more rudimentary, shorter, and less posteriorly elongated; antennæ paler and more ochraceous in hue.

Length (immature form) 3–4 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

We have described the immature form (which we have alone seen) because in that condition its ally *B. gibbus*, Fabr., is a most destructive pest to sugar-canes at Cawnpore. *B. latus* will probably be found an equally important pest in South India.

Genus **GEOCORIS**. (Vol. II, p. 29 & Vol. V, p. 23.)**GEOCORIS TRICOLOR**. (Vol. II, p. 29.)

Add: *Hab.* South India; Chikkaballapura, Kodaikanal (*T. V. Campbell*).—China; Shanghai (*Brit. Mus.*).

**GEOCORIS SUPERBUS**. (Vol. V, p. 23.)

I was previously able (*supra*) to figure the type of this species, and have now before me five specimens from South India. These vary in having the triangular dark spot at the base of the pronotum more or less reduced in size, in some specimens being practically absent.

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

3778. **Geocoris lutulentus**, sp. n.

Head, pronotum and scutellum ochraceous; corium a little paler, with a prominent black spot at the apical angle; membrane subhyaline, the basal half black; antennæ with the second, third and fourth joints black, their bases (more or less) and the whole of the first joint pale greyish; eyes pale castaneous; pronotum sparingly coarsely punctate; scutellum (excluding extreme base) more finely punctate; claval area punctate, the apex piceous; disk of corium impunctate; body beneath and legs pale ochraceous.

Length 3–4 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

3779. **Geocoris flaviceps**, *Burm.* (Salda) (*Ophthalmicus*) *Nova Acta &c.*, xvi, *Supp.* p. 301. 30 (1834); *Fieb.* (*Ophthalmicus*) *Ent. Mon.* p. 116. 4 (1844); *Dall.* (*Ophthalmicus*) *List Hem.* ii, p. 584 (1852); *Stål* (*Geocoris*), *Öfv. Vet.-Akad. Förh.* 1870, p. 661.

Shining bluish-black; head, rostrum and legs bright shining ochraceous; antennæ ochraceous, second joint, base of third and



the whole of fourth joint piceous; pronotum, scutellum and clavus thickly punctate; membrane hyaline, passing abdominal apex; second joint of antennæ slightly shorter than either third or fourth.

Length 4-5 min.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).—Malay Archipelago; Philippines.

*GEOCORIS LITURATUS.* (Vol. II, p. 30.)

Add: *Hab.* South India; Chikkaballapura and Mysore State (*T. V. Campbell*).

*GEOCORIS DUBREUILI.* (Vol. V, p. 24.)

Add: *Hab.* South India; Kodaikanal, Mysore State and Nilgiri Hills (*T. V. Campbell*).

3780. *Geocoris rufipennis*, sp. n.

Sanguineous; basal marginal area of head, pronotum (excluding lateral margins), scutellum, sternum and abdomen beneath, shining black; legs ochraceous; head beneath, coxæ and apices of femora sanguineous; antennæ with the basal joint ochraceous, second and third piceous, fourth mutilated; pronotum, scutellum and clavus more or less thickly punctate; membrane hyaline, about reaching abdominal apex.

Length 4 millim.

*Hab.* Calcutta.

3781. *Geocoris rutiloides*, sp. n.

Head, pronotum and scutellum black; pronotum with three pale ochraceous spots on anterior margin, the lateral margins and a small central spot on basal margin ochraceous; corium pale reddish-ochraceous, membrane a little paler than corium and with fuscous suffusions; body beneath black, segmental margins and coxæ ochraceous; legs pale ochraceous, the posterior femora (excluding apices) black; antennæ black; head, pronotum and scutellum coarsely punctate; pronotum with a subcruciform carination on anterior disk and a somewhat similar carination on scutellum; clavus more or less coarsely punctate; membrane slightly passing the abdominal apex.

Length 4 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

*GEOCORIS RUTILUS.* (Vol. II, p. 31.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

*GEOCORIS JUCUNDUS.* (Vol. II, p. 31.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

3782. *Geocoris erebus*, sp. n.

Black; third and fourth joints of the antennæ, lateral anterior spots on head, head beneath, rostrum, coxæ and legs, ochraceous;

second joint of antennæ slightly longer than either third or fourth joints; pronotum thickly coarsely punctate, with two more or less distinct transverse impunctate callosities a little before middle; scutellum thickly punctate, with a fine central longitudinal carination; clavus punctate; membrane pale ochraceous much suffused with fuscous, and about reaching abdominal apex; posterior femora, excluding apices, black.

Length 4 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

3783. *Geocoris varipes*, sp. n.

Allied to the preceding species *G. erebus*, but with the antennæ wholly black, all the femora (excluding apices) black, the second joint distinctly longer than either third or fourth joints; scutellum a little more robust and convex; pronotum with a distinct central longitudinal carina; membrane black. This is also a longer and broader species than *G. erebus*.

Length 5 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **GEOCOROIDES**, nov.

Type, *G. polytretus*, Dist.

*Distribution.* South India.

Allied to *Geocoris* but differing principally by the greater length of the corium and the rudimentary or practically aborted membrane; the body is also more elongate, the pronotum about as long as its anterior margin; scutellum longer and narrower, etc.



Fig. 86.—*Geocoroides polytretus*.

3784. *Geocoroides polytretus*, sp. n.

Black, shining, very strongly and coarsely punctate; legs ochraceous; eyes dark castaneous; antennæ piceous, the basal

joint more ochraceous; body elongate, scutellum centrally carinate from a little behind base to apex; membrane practically absent, the tegmina not reaching the abdominal apex.

Length 4 millim.

*Hab.* Nilgiri Hills; Lovedale (*T. V. Campbell*).

Genus **CHAULIOPS**. (Vol. II, p. 35 & Vol. V, p. 34.)

**CHAULIOPS FALLAX**. (Vol. II, p. 36.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **PAMERA**. (Vol. II, p. 51 & Vol. V, p. 50.)

**PAMERA GENICULATA**. (Vol. II, p. 54.)

Add: *Hab.* South India; Mysore State and Nilgiri Hills (*T. V. Campbell*).

Genus **EUCOSMETUS**. (Vol. II, p. 55 & Vol. V, p. 54.)

3785. **Eucosmetus nigronitens**, sp. n.

Head, pronotum and scutellum black; corium stramineous with narrow black streaks, a broad black oblique transverse fascia beyond middle inwardly containing a small white spot, the apical margin also black, but the extreme apical angle stramineous; membrane black, with a somewhat large apical white spot; body beneath black; legs ochraceous, anterior femora (excluding apices), a broad subapical annulation on intermediate tibiæ, a still broader apical annulation on posterior tibiæ, and the apices of the tarsi, black; antennæ ochraceous, apices of the first, second and third joints and the whole of the fourth joint, black; second antennal joint slightly longest, third and fourth joints subequal in length; posterior lobe of pronotum very coarsely punctate; anterior femora strongly incrassated and distinctly spined beneath; membrane about reaching abdominal apex.

Length 5 millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

Genus **AGUNGA**. (Vol. V, p. 58.)

**AGUNGA FULGIDA**. (Vol. V, p. 59.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **APPOLONIUS**. (Vol. II, p. 62.)

3786. **Appolonius picturatus**, sp. n.

Head, including eyes, and anterior lobe of pronotum black, posterior pronotal lobe very pale castaneous, traversed by three pale ochraceous longitudinal fasciæ, the lateral pronotal margins also

very narrowly of that colour; scutellum black; corium dull pale ochraceous, darker centrally and on apical area, the lateral margin paler, a prominent white spot near each inner angle; membrane piceus; body beneath black; legs ochraceous, femora (excluding apices) a little darker; head acuminate, the central lobe prominently produced; antennæ black, the basal joint and a spot near



Fig. 87.—*Appolonius picturatus*.

base of second joint pale ochraceous; the whole upper surface thickly finely punctate, the scutellum somewhat rugose.

Length 4–5 millin.

*Hab.* South India; Chikkaballapura and Kodaikanal; Nilgiri Hills, Lovedale (*T. V. Campbell*).

#### Genus **LOCUTIUS**, nov.

Type, *L. atratus*, Dist.

*Distribution.* South India.

Head short and broad, much broader than long, anteriorly obtusely acuminate; antennæ finely pilose, with the second joint longest, third and fourth subequal in length; pronotum a little broader at base than long, anterior lobe longest and somewhat convexly elevated, posterior lobe coarsely punctate, lateral margins slightly convex, anterior margin concave; scutellum triangular; membrane rudimentary and not reaching abdominal apex in type, in a second species almost fully developed; anterior femora globosely incrassate, anterior tibiæ slightly curved, all the tibiæ moderately spinulose.

I place this genus near *Bosbequius* (vol. ii, p. 64).

#### 3787. *Locutius atratus*, sp. n.

Shining black above, the posterior area of the pronotum and the corium inclining to very dark castaneous; body beneath black; legs ochraceous, femora (excluding apices) darker in hue;

abdomen above black; first and second joints of antennæ ochraceous, third and fourth piceous; anterior lobe of pronotum glabrous, basal area thickly coarsely punctate, and a little paler than anterior lobe; scutellum and corium thickly punctate, the lateral margins of the latter narrowly ochraceous; membrane



Fig. 88.—*Locutius atratus*.

rudimentary and not reaching abdominal apex; other structural characters as in generic diagnosis.

Length 3 millim.

*Hab.* South India; Chikkaballapura and Nilgiri Hills, Lovedale (*T. V. Campbell*).

**3788. *Locutius brunneus*, sp. n.**

A smaller species than the preceding, *L. atratus*; the posterior area of the pronotum brunnescent; membrane more fully developed; antennæ ochraceous, the third and fourth joints mutilated; body beneath piceous, legs brownish-ochraceous; posterior angles of the pronotum distinctly dark ochraceous; other characters generally as in *L. atratus*, but apart from the different coloration, the small size and the more developed membrane separate it very sharply from that species.

Length 2 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

**3789. *Locutius pallescens*, sp. n.**

Head, pronotum and scutellum black, the basal marginal area of the pronotum more brownish-ochraceous; corium pale stramineous, the membrane subhyaline; body beneath and legs black, extreme apices of the femora, and the whole of the tibiæ and tarsi ochraceous; antennæ with the first and second joints ochraceous, third and fourth joints black, second joint longest, third and fourth almost subequal in length; posterior marginal area of

the pronotum paler and coarsely punctate; membrane reaching the abdominal apex; anterior femora globosely incrassate and finely spined beneath.

Length 3 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **POLYCRATES**. (Vol. II, p. 64.)

3790. ***Polycrates tibialis***, sp. n.

Head, anterior lobe of pronotum, and scutellum black; posterior pronotal lobe, body beneath and femora dark castaneous; extreme apices of anterior femora, tibiæ and tarsi ochraceous, apical areas of intermediate and posterior tibiæ castaneous; corium castaneous, more or less suffused with brownish-ochraceous; membrane piceous, paler on basal area; antennæ mutilated in type; posterior



Fig. 89.—*Polycrates tibialis*.

lobe of pronotum thickly, coarsely punctate; scutellum thickly punctate, with a subcruciform carination, of which the longitudinal continuation on the apical half is the most strongly developed; corium finely punctate; anterior tibiæ with their apices strongly, inwardly, laminately developed.

Length  $7\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

3791. ***Polycrates uniformis***, sp. n.

Head, pronotum, body beneath and legs dark castaneous, tibiæ and tarsi ochraceous; corium pale castaneous, with darker suffusions on apical half; membrane brownish-ochraceous; antennæ brownish-ochraceous, apical joint (excluding extreme base) piceous,



second joint a little longer than the third, almost subequal with the fourth; anterior pronotal lobe moderately convexly globose, posterior lobe not much more than half its length and coarsely punctate; scutellum thickly punctate, cruciformly carinate, the longitudinal portion of the carination on apical area much the most strongly developed, centrally depressed on basal area; corium finely punctate; membrane reaching the abdominal apex; anterior femora strongly incrassated and spined beneath; anterior tibiæ moderately dilated at apices.

Length 6 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

This species is to be recognized by the narrower and more globose anterior lobe of the pronotum.

### Genus **ADAUCTUS**. (Vol. V, p. 65.)

#### 3792. *Adauctus nigrocapitatus*, sp. n.

Head black; pronotum brownish-ochraceous, the anterior area a little darker, the basal angles paler; scutellum brownish-ochraceous; corium stramineous, a somewhat obscure central spot in clavus, two spots outside clavus, a spot near middle of costal margin and two on apical margin black; membrane subhyaline; body beneath castaneous, legs ochraceous; antennæ ochraceous, second joint longest, third and fourth subequal in length; scutellum distinctly coarsely punctate and somewhat centrally depressed; corium strongly punctate; membrane passing the abdominal apex; tibiæ somewhat strongly spinous.

Length 4-4½ millim.

*Hab.* South India; Chikkaballapura and Mysore State (*T. V. Campbell*).

### Genus **FABULINUS**, nov.

Type, *F. mysorensis*, sp. n.

*Distribution.* South India.

Head anteriorly acuminate, about as long as breadth between eyes; antennæ very finely pilose, second joint a little longest; pronotum longer than half the breadth at base, not transversely constricted, the anterior area somewhat globosely nodulose, the lateral angles subprominent; scutellum cruciformly carinate; femora moderately incrassate; tibiæ finely spinulose.

This genus may be placed near *Thebanus* (vol. ii, p. 67), from which it differs by the greater length and more truncate base of the pronotum.

#### 3793. *Fabulinus mysorensis*, sp. n.

Head, anterior area of the pronotum and the basal area of scutellum black; posterior area of pronotum, lateral and apical areas of scutellum, and body beneath castaneous; corium dull

stramineous and thickly darkly punctate, the costal areas paler and impunctate; membrane dull greyish hyaline; antennæ very finely pilose, piceous, the basal joint ochraceous, second joint a little longer than the third, which is again a little longer than the fourth; head and pronotum thickly punctate, distinctly transversely callous on anterior marginal area; scutellum coarsely



Fig. 90.—*Fabulinus mysorensis*.

punctate, the posterior longitudinal half of the suberuciform elevation very prominent; corium, excluding costal areas, finely punctate.

Length 3–4 millim.

*Hab.* South India; Mysore State (*T. V. Campbell*).

3794. *Fabulinus gemmatus*, sp. n.

Head, pronotum, scutellum and body beneath black; corium dull ochraceous, a somewhat large and irregularly shaped spot at inner angle, a spot at apical angle, a short slender oblique stripe outside clavus and an ill-defined elongate spot on about centre of costal margin, black; membrane dull hyaline, with its basal area ochraceously tinted; femora black, their apices and the whole of the tibiæ and tarsi ochraceous; antennæ black, first, third and fourth joints almost subequal in length, second joint a little longest; pronotum thickly, finely punctate; scutellum very finely punctate, much more strongly punctate behind the cruciform carination; corium and clavus finely punctate; membrane slightly passing the abdominal apex.

Length  $3\frac{1}{2}$ –4 millim.

*Hab.* South India; Nilgiri Hills, Lovedale (*T. V. Campbell*).

Genus **THEBANUS**. (Vol. II, p. 67.)3795. **Thebanus antennatus**, sp. n.

Head and pronotum castaneous, the anterior and lateral margins of the latter more piceous; scutellum piceous-brown before the anterior branches of the cruciform carination and pale castaneous behind them; corium very pale ochraceous, the apical angles narrowly black; membrane hyaline; sternum castaneous, abdomen beneath ochraceous; legs pale ochraceous; antennæ black, the basal joint ochraceous, second joint a little longest, remaining joints almost subequal in length; pronotum finely punctate; scutellum punctate, more coarsely punctate behind the cruciform carination; corium very finely punctate.

Length  $3\frac{1}{2}$  millim.

*Hab.* South India; Nandidrug (*T. V. Campbell*).

Genus **TROPISTETHUS**.  
(Vol. II, p. 70 & Vol. V, p. 62.)3796. **Tropistethus aurantiacus**, sp. n.

Bright, shining, dark ochraceous; corium paler ochraceous, membrane pale hyaline; sternum and legs ochraceous, abdomen beneath darker ochraceous; antennæ ochraceous, second joint a little longest; pronotum with the anterior and the posterior truncate margin moderately carinate; corium and clavus thickly punctate; membrane not passing the abdominal apex; anterior femora moderately incrassated, shortly spinous beneath near apex.

Length 3 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

**TROPISTETHUS INDICUS**. (Vol. II, p. 71.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **CLIGENES**. (Vol. II, p. 72 & Vol. V, p. 62.)**CLIGENES SEXNOTATUS**. (Vol. V, p. 62.)

Add: *Hab.* South India; Kodaikanal and Nilgiri Hills (*T. V. Campbell*).

3797. **Cligenes fraternus**, sp. n.

Head, anterior area of the pronotum, scutellum and body beneath, dark castaneous; anterior narrow margin and broad posterior area of pronotum, and the legs pale ochraceous; corium pale greyish-white, a small spot near middle of costal margin and the apical angle dark castaneous; membrane pale hyaline; antennæ ochraceous, second joint longest; pronotum thickly punctate, the pale posterior area sometimes crossed by a central

castaneous line, the basal angles also narrowly castaneous; membrane slightly passing the abdominal apex; corium faintly, finely punctate.

Length 3 millim.

*Hab.* Ceylon (*E. E. Green*).

Allied to *C. patricius*, Dist.

Genus **DINIELLA**. (Vol. II, p. 73 & Vol. V, p. 63.)

**DINIELLA BENGALENSIS**. (Vol. V, p. 63.)

Add to description: apical joint of antennæ piceous.

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

3798. **Diniella insignis**, sp. n.

Head, pronotum and scutellum shining black, pronotal basal lateral angles ochraceous; corium pale ochraceous, apical half brownish-ochraceous, preceded by a linear pale greyish costal spot; body beneath black, legs ochraceous; antennæ with the first and second joints ochraceous, third and fourth black, extreme base of third ochraceous, second, third and fourth joints almost subequal in length; pronotum slightly transversely impressed before middle, between which and base of head the surface is slightly raised and glabrous, and behind which it is distinctly punctate; scutellum punctate and slightly transversely striate; clavus and more than posterior half of corium distinctly punctate; in the type the membrane is rudimentary and does not reach the abdominal apex.

Length 3 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **APHANUS**. (Vol. II, p. 79 & Vol. V, p. 67.)

**APHANUS SORDIDUS**. (Vol. II, p. 79.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

**APHANUS LINEOSUS**. (Vol. II, p. 80.)

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

This appears to be a variable species, for in most of the specimens sent from South India by Dr. Campbell, the two lineate ochraceous spots near the apex of scutellum are fused, thus rendering the whole apical area ochraceous.

3799. **Aphanus lateralis**, sp. n.

Head, pronotum, scutellum and corium black; membrane piceous; lateral margins of pronotum and corium somewhat broadly pale stramineous; body beneath and legs black, the tibiae and tarsi more piceous; antennæ with the basal joint black, remaining joints brownish-ochraceous, second joint a little longest,

third and fourth subequal in length; pronotum with the pale lateral margins somewhat obliquely laminate, the basal area centrally longitudinally carinate; scutellum moderately ridged at base; membrane not quite reaching abdominal apex; anterior femora incrassate and with a prominent spine near apex.

Length  $9\frac{1}{2}$  millim.

*Hab.* South India; Kodaikanal (*T. V. Campbell*).

**3800. *Aphanus discoguttatus*, sp. n.**

Head, pronotum and scutellum black; pronotum with narrow anterior margin and broad lateral margin pale ochraceous; apex of scutellum ochraceous; corium piceous-brown, costal margin—broken near middle and before apex—the apical angle, and a small spot near middle of apical margin, ochraceous; membrane black; body beneath piceous; legs ochraceous, anterior femora (excluding extreme apices), about apical halves of intermediate and posterior femora, and apices of tibiae and tarsi, black; antennæ with the basal joint black, second, third and fourth ochraceous, apex of second, and apical halves of third and fourth black; pronotum moderately, broadly, transversely impressed behind middle, basal area coarsely punctate and with an obscure, central, longitudinal carina, the lateral margins obliquely laminate and impunctate; scutellum moderately depressed near base, and transversely wrinkled on apical area; membrane nearly (more or less) reaching the abdominal apex; intermediate and posterior tibiae with long bristles.

Length 8–9 millim.

*Hab.* South India; Nandidrug, Kodaikanal and Yercaud (*T. V. Campbell*).

**3801. *Aphanus ornatus*, sp. n.**

Head black, sometimes thickly greyish pubescent; pronotum with the anterior area purplish-black, with two small transverse ochraceous spots on its anterior margin, posterior area ochraceous, thickly brownly punctate, and with a transverse black spot near each lateral angle, the lateral margins ampliate, recurved, and very pale ochraceous; scutellum with two small central spots and its apex very pale ochraceous; corium ochraceous, darkly punctate, a large spot near each inner angle, and the apical margin black, costal margin pale and impunctate; body beneath dark castaneous; legs black, apices of the anterior femora, basal halves of the intermediate and posterior femora, and tibiae excluding extreme apices, ochraceous; antennæ with the first, second and third joints brownish-ochraceous, fourth joint piceous, second and third joints a little longest.

Length  $8-8\frac{1}{2}$  millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **METOCHUS.**

Metochus, *Scott, A. M. N. H.* (4) xiv, p. 433 (1874); *Bergr. J. Bomb. N. H. Soc.* xxiv, p. 174 (1915).

*Dieuches* (part), *Dist.* vol. ii, p. 82, & vol. v, p. 71.

Type, *M. abbreviatus*, Scott, from Japan.

*Distribution.* Ceylon; India; Malay Archipelago; Japan.

I had previously followed Stål, Breddin, Oshanin, Lethierry & Severin, and other authorities in placing this genus as a section of *Dieuches*, but I now follow Bergroth (*supra*) in recognizing it as a distinct genus. "The head is much broader than the apex of the pronotum and the pronotal lateral margins are narrowly carinated and strongly sinuated, whereas in *Dieuches* the head is not or scarcely broader than the apex of the pronotum and the pronotal lateral margins broadly laminately expanded and not or scarcely sinuated."

**METOCHUS UNIGUTTATUS.**

*Dieuches uniguttatus* (vol. ii, p. 82).

Add: *Hab.* South India, Chikkaballapura (*T. V. Campbell*).

3802. **Metochus illustris**, sp. n.

Head, anterior lobe of pronotum, and scutellum black; posterior lobe of pronotum and corium dark castaneous, the latter with the costal marginal area and a subapical transverse fascia—sometimes macular—pale ochraceous; membrane fuscous; body beneath black; legs ochraceous, anterior femora (excluding apices) and about apical thirds of intermediate and posterior femora, very dark castaneous; first and second joints of the antennæ dull ochraceous, remaining joints more piceous, second joint longest; head broader than the apex of the pronotum, of which the lateral margins are shortly carinated and strongly sinuate, the posterior lobe very finely punctate; corium finely punctate; anterior femora finely spined beneath; scutellum moderately but distinctly depressed near base.

Length 6 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

A small but distinct species.

**METOCHUS FUSCANS.**

*Dieuches fuscans* (vol. ii, p. 83).

Genus **PARADIEUCHES.**

*Paradieuches*, *Dist. Trans. Ent. Soc. Lond.* 1883, p. 438.

Type, *P. lewisi*, *Dist.*, from Japan.\*

*Distribution.* Japan; India.

"Allied to *Dieuches* (Section *D. armipes*, Fabr.), but with the

\* *Trans. Ent. Soc. Lond.* 1883, pl. xx, fig. 4.



anterior femora strongly incrassated and distinctly spined beneath near apex; pronotum with the anterior margins convex, transversely constricted a little behind the middle, before which the anterior area is subglobose, the lateral margins dilated by not extending to apical margin, which is alone as wide as the head, posterior margin concavely sinuated before the scutellum."

"This genus appears to be somewhat intermediate between *Dieuches* and *Neurocladus*."

3803. *Paradieuches pallipes*, sp. n.

Head, anterior lobe of pronotum, and scutellum black, two small spots behind eyes on anterior margin of pronotum, the lateral pronotal marginal areas, two central spots and apex to scutellum pale ochraceous, posterior pronotal lobe brownish-ochraceous, somewhat thickly blackly punctate, the basal lateral angles narrowly black; scutellum coarsely punctate; corium pale fuscous-brown, the costal marginal areas and a large subapical spot pale ochraceous, the apical margin and an irregular spot before the pale subapical one black, the whole surface more or less punctate, the clavus thickly punctate; membrane fuscous-brown, reaching the abdominal apex; body beneath black; legs pale ochraceous, apical areas of femora and extreme apices of the tibiæ and tarsi fuscous-brown; tibiæ distinctly spinulose; antennæ more or less ochraceous, extreme apices of second and third joints and apical half of fourth joint dark fuscous, second joint longest, third and fourth joints almost subequal in length, basal joint distinctly sparsely hirsute; pronotum much longer than broad, the anterior lobe nearly twice as long as posterior lobe; anterior femora incrassated and finely spined beneath.

Length 7 millim.

*Hab.* South India; Chikkaballapura (*T. V. Campbell*).

Genus **DIEUCHES**. (Vol. II, p. 82 (part) &  
Vol. V, p. 71 (part).)

*DIEUCHES LEUCOCERAS*, *Walk.* (Vol. II, p. 83.)

*Aphanus leucoceras*, *Bergr. J. Bomb. Nat. Hist. Soc.* xxiv, p. 173 (1915).

Add: *Hab.* South India; Chikkaballapura (*T. V. Campbell*).

3804. *Dieuches hypocrita*, *Bergr. J. Bomb. Nat. Hist. Soc.* xxiv, p. 173 (1915).

This species is stated by its describer to be distinguished from the other Indian species by the longer pronotum. "Pronotum æque longum ac latum, lateribus post medium levissime sinuatum, lobo antico quam postico sesqui-longiore, hoc punctulato."

Length 11.5 millim.

*Hab.* Bombay.

Genus **LETHÆUS**. (Vol. II, p. 87 & Vol. V, p. 77.)

3805. **Lethæus notabilis**, *Dist. Entomologist*, xliv, p. 310 (1911).

Head black, opaque, ocelli red; antennæ sordidly stramineous, bases of third and fourth joints piceous; pronotum and scutellum shining dark castaneous or black, anterior margin, extreme lateral margins, and lateral angles of the former pale ochraceous; clavus and corium pale shining ochraceous; two spots on inner claval margin, one near base the other beyond middle, corium with a spot on basal area, an irregular transverse black fascia near inner angle, enclosing a small ochraceous spot, and the apical angle shining black; membrane subhyaline, with the veins brownish; body beneath castaneous; rostrum and legs pale ochraceous; head including eyes a little more than half the width of pronotum at base; ocelli nearly touching the eyes; antennæ with the basal joint slightly shorter than head, second joint much longer but not quite twice as long as first, third and fourth subequal in length, each slightly shorter than second; pronotum somewhat thickly, finely punctate, transversely constricted before the middle, the posterior angles rounded and slightly nodulose, the lateral margins nearly straight and moderately oblique; scutellum a little longer than broad at base, finely punctate, distinctly longitudinally ridged near each lateral margin; clavus with several longitudinal series of punctures; corium somewhat sparsely punctate, the punctures mostly in longitudinal series; membrane with four veins connected at the basal cell; rostrum reaching the posterior coxæ; sternum distinctly punctate; posterior tibiæ distinctly finely spinulose, posterior tarsi with the first joint longer than the two remaining joints together.

Length  $4\frac{1}{2}$  millim.

*Hab.* Ceylon; Sigirya (*E. E. Green*).

Allied to *L. crassiceps*, Dohrn (vol. v, p. 77).

Genus **GONSALVUS**. (Vol. II, p. 93 & Vol. V, p. 91.)

**GONSALVUS SPINOSUS**. (Vol. V, p. 91.)

Add: *Hab.* Allahabad (*Dr. A. D. Imms*).

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Bergroth is reported (*Zoological Record*) to have published the description of a species *Phenacantha androgyna* (*Ann. Soc. Ent. Belg.* lviii, p. 185, 1914); but as previously stated I have found it impossible during present war conditions to see that volume.

## ALPHABETICAL INDEX.

- abbreviatus (Macropes), 187.  
 abbreviatus (Metochus), 200.  
 abdominalis (Serinetha), 172.  
 aberrans (Erthesina), 121.  
 aberrans (Galerius), 79.  
 abesum (Coptosoma), 114.  
 Acanthosomatinae, 148.  
 Acesines, 144.  
 Acestra, 162.  
 acicularis (Plinactus), 157.  
 acecephaloides (Neodartus), 25.  
 Aconura, 77.  
 Acropona, 39.  
 acrostictus (Geotomus), 118.  
 acuta (Leptocoris), 161.  
 acuticeps (Dalpada), 120.  
 Adauctus, 195.  
 admota (Haidara), 158.  
 Adria, 127.  
 Eliomorpha, 127.  
 Eternus, 50.  
 Aguriabana, 105.  
 Ahenobarbus, 28.  
 affinis (Gynenica), 136.  
 affinis (Leofa), 87.  
 Agonoscelis, 137.  
 Agraphopus, 171.  
 Agunga, 191.  
 Akbaratus, 165.  
 albicincta (Elasmucha), 149.  
 albicinctus (Orosius), 85.  
 albiditarsis (Ochrochira), 151.  
 albifrons (Trebellius), 53.  
 albomaculata (Thomsoniella), 32.  
 albomaculatus (Parabolocratus), 32.  
 albomaculatus (Paralimnus), 62.  
 albororatus (Jassus), 48.  
 albosignatus (Platyretus), 38.  
 aliena (Carbula), 133.  
 Alitirus, 63.  
 Allectus, 75.  
 Amblycara, 139.  
 Anasida, 146.  
 angulatus (Drabescus), 42.  
 Angulus, 98.  
 Anomiana, 109.  
 Anoplocnemis, 153.  
 antennatus (Thebanus), 197.  
 Antestia, 136.  
 Aphanus, 198.  
 apicalis (Nephotettix), 60.  
 apiceicornis (Homocercus), 154.  
 Apphia, 4.  
 Appolonius, 191.  
 aratrix (Iphiarusa), 145.  
 arciferum (Coptosoma), 115.  
 arcuata (Thomsoniella), 32.  
 arcuatus (Parabolocratus), 32.  
 armaticeps (Dalpada), 120.  
 ar yana (Sabina), 46.  
 Aschistocoris, 156.  
 Aschistus, 156.  
 Asopinae, 146.  
 aspera (Elasmucha), 149.  
 asperum (Elasmostethus), 149.  
 Aspilocoryphus, 180.  
 assamensis (Ahenobarbus), 28.  
 assauensis (Scaphoidens), 67.  
 assmuthi (Chilocoris), 119.  
 assmuthi (Chilocoristoides), 119.  
 Asylana, 123.  
 ater (Cydnus), 117.  
 Athysanus, 51.  
 atkinsoni (Phrynomorphus), 51.  
 atomarius (Euthetus), 165.  
 atrata (Aconura), 77.  
 atratus (Locutius), 192.  
 atrifrons (Typhlocyba), 102.  
 atronotata (Kolla), 10.  
 atropurpurea (Empoasca), 92.  
 atrosignata (Typhlocyba), 100.  
 attenuata (Penthimia), 22.  
 aurantiacus (Tropistethus), 197.  
 australis (Homocercus), 155.  
 badia (Penthimia), 17.

- badius (*Macrocytus*), 118.  
 baticus (*Bolanus*), 89.  
 Bainbriggeanus, 135.  
 bambusana (*Acesines*), 144.  
 Banus, 55.  
 bellulus (*Camulus*), 98.  
 bellus (*Dunninus*), 145.  
 bellus (*Enacanthus*), 11.  
 bellus (*Mycterizon*), 145.  
 bengalensis (*Diniella*), 198.  
 bengalensis (*Eutettix*), 60.  
 bengalensis (*Menida*), 142.  
 bengalensis (*Pentatoma*), 142.  
 Berytidae, 173.  
 Bharata, 12.  
 bhoutanica (*Cazira*), 146.  
 bicolor (*Goniagnathus*), 43.  
 biguttata (*Carbula*), 133.  
 bihamatus (*Metacanthus*), 178.  
 binotata (*Anoplocnemis*), 153.  
 binotata (*Empoasca*), 94.  
 bipunctatus (*Cletus*), 158.  
 bipunctatus (*Divus*), 61.  
 bipunctatus (*Melanotelus*), 180.  
 birmanus (*Geotonus*), 119.  
 bisignata (*Kerinhana*), 144.  
 bisignata (*Menida*), 144.  
 Bituitus, 70.  
 blandula (*Coptosoma*), 114.  
 Blissus, 188.  
 Bolanus, 89.  
 Bolanusoides, 90.  
 bombæus (*Aschistocoris*), 157.  
 borealis (*Homœocerus*), 155.  
 borillus (*Cletus*), 158.  
 brachycephalus (*Sca-phoideus*), 66.  
 Brachyplatys, 110.  
 breddini (*Coptosoma*), 112.  
 brevicornis (*Aschistocoris*), 156.  
 brevicornis (*Aschistus*), 156.  
 brevirostris (*Scutellera*), 116.  
 brevis (*Cœlidia*), 49.  
 brevis (*Jassus*), 49.  
 brevis (*Tettigonia*), 49.  
 brevitabilis (*Psilolomia*), 161.  
 brevittata (*Pentatoma*), 127.  
 brunnescens (*Kutara*), 42.  
 brunneus (*Locutius*), 193.  
 Brunsellius, 157.  
 Bumizana, 32.  
 burmanica (*Apphia*), 5.  
 burmanica (*Saontarana*), 122.  
 butleri (*Craspedum*), 159.  
 butleri (*Deltocephalus*), 83.  
 butleri (*Faenius*), 15.  
 Cænocoris, 181.  
 calcar (*Petillia*), 154.  
 campbelli (*Agonoscelis*), 137.  
 campbelli (*Coptosoma*), 113.  
 campbelli (*Craspedum*), 159.  
 campbelli (*Deltocephalus*), 82.  
 campbelli (*Lygæus*), 179.  
 Campbellinella, 69.  
 Camulus, 97.  
 Canthecona, 147.  
 capitata (*Neocarbula*), 134.  
 capitata (*Thagria*), 44.  
 capitatus (*Deltocephalus*), 83.  
 capitatus (*Ilecalus*), 30.  
 capitatus (*Malichus*), 25.  
 capitatus (*Viridomarus*), 70.  
 Capys, 177.  
 Carbula, 133.  
 cardamomi (*Hubertiella*), 178.  
 cardinalis (*Typhlocyba*), 101.  
 carinatum (*Coptosoma*), 115.  
 Carpocoris, 130.  
 Carvaka, 40.  
 castanea (*Anoplocnemis*), 153.  
 Catacanthus, 139.  
 Caystrus, 126.  
 Cazira, 146.  
 cephalicus (*Maximianus*), 80.  
 ceylanica (*Menida*), 142.  
 ceylanica (*Ossipaga*), 185.  
 ceylanicus (*Nysius*), 181.  
 ceylonica (*Tettigoniella*), 4.  
 Chaubattiana, 140.  
 Chauliops, 191.  
 Chikkaballapura, 107.  
 Chilocoris, 119.  
 Chilocoristoides, 119.  
 Chrysocoris, 116.  
 Chudania, 29.  
 cingalensis (*Gunghu-yana*), 62.  
 Cinxia, 137.  
 Clavigralla, 159.  
 Cletus, 158.  
 Cligenes, 197.  
 Clinocoris, 149.  
 cœrulescens (*Typhlocyba*), 101.  
 collinus (*Consivius*), 172.  
 coloratus (*Deltocephalus*), 82.  
 compacta (*Anaxandra*), 145.  
 compacta (*Iphiarusa*), 145.  
 compacta (*Pentlimia*), 16.  
 Compastes, 137.  
 connexus (*Platyretus*), 37.  
 consimilis (*Macropes*), 187.  
 Consivius, 172.  
 consobrinus (*Macropes*), 186.  
 conspersa (*Tambila*), 24.  
 contaminatum (*Lygæosoma*), 181.  
 coniectum (*Coptosoma*), 111.  
 coonoorensis (*Jassus*), 48.  
 Coptosoma, 111.  
 Coreidae, 151.  
 Corizus, 168.  
 cornelia (*Tettigoniella*), 2.  
 coronatus (*Phrynomorphus*), 52.  
 Coroticus, 45.  
 Craspedum, 159.  
 Crispina, 76.  
 Cunedda, 46.  
 Cydninae, 116.  
 Cydnus, 117.  
 Cymus, 183.

- Daclera, 162.  
 Dalpada, 119.  
 darjilingensis (Deltoccephalus), 82.  
 Datanes, 137.  
 Degonetus, 139.  
 delecta (Chudania), 29.  
 delicatula (Typhlocyba), 104.  
 Deltoccephalus, 81.  
 dentatus (Halys), 121.  
 deplanata (Dalpada), 119.  
 desjardinsii (Stenotoma), 124.  
 devastans (Empoasca), 93.  
 diana (Typhlocyba), 100.  
 diaphana (Kolla), 9.  
 Didius, 36.  
 Dieuches, 200, 201.  
 difformis (Thagria), 44.  
 diluta (Therapha), 172.  
 dilutus (Macropes), 186.  
 Diniella, 198.  
 Dio, 56.  
 discoguttatus (Aphanus), 199.  
 dissimilis (Xestoccephalus), 55.  
 divaricatus (Phlepsius), 54.  
 Divitiacus, 59.  
 Divus, 61.  
 Dolycoris, 130.  
 Domiduca, 184.  
 dorsalis (Deltoccephalus), 81.  
 Drabescus, 42.  
 dubia (Typhlocyba), 102.  
 dubreuii (Geocoris), 189.  
 Dunnus, 145.  
 durga (Paivanana), 96.  
 Elasmotethus, 149.  
 Elasmucha, 149.  
 eliyana (Kolla), 10.  
 elongata (Bumizana), 32.  
 elongata (Keriahana), 144.  
 elongata (Menida), 144.  
 elongatus (Brunsellius), 157.  
 Empoanara, 106.  
 Empoasca, 91.  
 Empoascanara, 94.  
 erebus (Geocoris), 189.  
 erebus (Penthimia), 22.  
 Erthesina, 120.  
 Euacanthus, 11.  
 Eucosmetus, 191.  
 Eupteryx, 96.  
 Eurydeina, 137.  
 Eurymenida, 142.  
 Eusarcocoris, 131.  
 Eutettix, 60.  
 Euthetus, 163.  
 excelsus (Jassus), 49.  
 exemplificata (Domiduca), 184.  
 exemptus (Priassus), 138.  
 expansus (Macrocytus), 118.  
 Fabulinus, 195.  
 facialis (Dio), 56.  
 facialis (Hecalus), 29.  
 facialis (Paralimnus), 62.  
 facialis (Postumus), 84.  
 Faenius, 14.  
 fallax (Chauliops), 191.  
 fasciatus (Akbaratus), 165.  
 fasciatus (Phricodus), 124.  
 faustus (Nysiodes), 183.  
 felicitatis (Chilocoris-toides), 119.  
 femoralis (Macropes), 186.  
 ferruginea (Tettigoniella), 1.  
 ficusius (Placosternum), 139.  
 fidelis (Mahalana), 63.  
 fisheri (Akbaratus), 165.  
 flavescens (Empoasca), 91.  
 flaviceps (Geocoris), 188.  
 flavocapitata (Penthimia), 20.  
 fletcheri (Æliomorpha), 127.  
 fletcheri (Bainbriggeanus), 135.  
 fletcheri (Coptosoma), 114.  
 fletcheri (Halyomorpha), 129.  
 fletcheri (Tambila), 23.  
 formidabilis (Mictis), 151.  
 formosa (Menida), 142.  
 fraterna (Penthimia), 21.  
 fraternus (Aspilocoryphus), 180.  
 fraternus (Cligenes), 197.  
 fraternus (Zizyphoides), 74.  
 friwaldskyi (Cazira), 146.  
 fryeri (Jassus), 47.  
 fulgida (Agunga), 191.  
 fullo (Erthesina), 120.  
 fulvescens (Euthetus), 164.  
 fumosus (Akbaratus), 166.  
 fumosus (Goniagnathus), 43.  
 funebris (Penthimia), 19.  
 funebris (Sciocoris), 126.  
 fuscans (Dieuches), 200.  
 fuscans (Metochus), 200.  
 fuscofasciata (Empoasca), 92.  
 fuscomaculatum (Coptosoma), 113.  
 fusconervosus (Phrynomorphus), 51.  
 fusco-varius (Deltoccephalus), 83.  
 fuscovenosa (Tettigoniella), 4.  
 gagatina (Tettigonia), 13.  
 gagatina (Tettigoniella), 13.  
 gagatina (Ujna), 13.  
 Galerius, 78.  
 ganesa (Kolla), 8.  
 gardineri (Aliturus), 63.  
 gardineri (Neoliturus), 63.  
 gazana (Gungnhayana), 61.  
 gemina (Tettigoniella), 2.  
 gemmata (Typhlocyba), 99.  
 gemmatus (Fabulinus), 196.  
 geniculata (Pamera), 191.  
 Geocoris, 188.  
 Geocoroides, 190.  
 Geotomus, 118.  
 germanus (Cydnus), 117.  
 Gessius, 39.  
 gibbosa (Clavigralla), 159.  
 gigas (Hypselpopus), 166.  
 gladiatoria (Amblycara), 139.  
 glaucescens (Parabolo-cratus), 30.



- godavariensis (Hecalus), 30.  
 Goniagnathus, 43.  
 Gonsilvus, 202.  
 gracilis (Capys), 177.  
 graminea (Nezara), 140.  
 Graphosomatinae, 116.  
 Graptostethus, 179.  
 gratiosa (Preta), 12.  
 gravelyi (Tambila), 23.  
 gravelyi (Taprobanus), 173.  
 greeni (Nirvana), 33.  
 Gulielmus, 127.  
 Gunghuyana, 61.  
 Gunhilda, 88.  
 Gurawa, 28.  
 guttiger (Eusarcocoris), 131.  
 guttulata (Typhlocyba), 101.  
 Gynenica, 136.  
 Gyponinae, 16.  
  
 Hajdara, 158.  
 Halyaria, 119.  
 Halyomorpha, 129.  
 Halys, 121.  
 haragamensis (Coptosoma), 112.  
 Hecalus, 29.  
 Hermolaus, 132.  
 heros (Bolanusoides), 90.  
 heterospila (Sastragala), 148.  
 hieroglyphicus (Aeternus), 50.  
 hieroglyphicus (Scaphoideus), 65.  
 himalayanus (Platyretus), 38.  
 histrio (Menida), 142.  
 Homœocerus, 154.  
 hopinensis (Tettigoniella), 3.  
 horni (Capys), 177.  
 horni (Catacanthus), 139.  
 horni (Hermolaus), 133.  
 horni (Tolumnia), 130.  
 Hotea, 116.  
 Hubertiella, 178.  
 Hussa, 68.  
 hyoscyami (Therapha), 172.  
 hypocrita (Dieuches), 201.  
 Hypselopus, 163.  
 hystrix (Phricodus), 124.  
  
 illuminata (Halyomorpha), 129.  
 illuminata (Kana), 35.  
 illustrata (Campbellinella), 69.  
 illustris (Metoehus), 200.  
 illustris (Tettigoniella), 1.  
 immaculata (Tolumnia), 130.  
 immaculatum (Morinoschema), 130.  
 immaculatus (Catacanthus), 140.  
 imperialis (Corizus), 170.  
 impura (Sepontia), 131.  
 incarnatus (Catacanthus), 140.  
 incerta (Typhlocyba), 104.  
 incertus (Lygæus), 179.  
 inconspicuus (Nysius), 182.  
 indica (Tessaratomy), 148.  
 indicatrix (Galerius), 78.  
 indicus (Dolycoris), 130.  
 indicus (Jassus), 47.  
 indicus (Phrynomorphus), 51.  
 indicus (Tropistethus), 197.  
 indicus (Zizyphoides), 73.  
 indistincta (Tettigoniella), 1.  
 indra (Paivanana), 95.  
 indra (Typhlocyba), 95.  
 indus (Homœocerus), 156.  
 infirmus (Deltocephalus), 81.  
 insignior (Tettigoniella), 1.  
 insignis (Bharata), 12.  
 insignis (Diniella), 198.  
 insignis (Hussa), 68.  
 insignis (Kolla), 7.  
 insignis (Ninus), 183.  
 insignis (Nirvana), 33.  
 insocia (Carbula), 133.  
 Iphiarusa, 145.  
 Iterduca, 174.  
  
 Jassidæ, 1.  
 Jassinæ, 29.  
 Jassus, 47.  
 jucundus (Geocoris), 189.  
  
 jugatoria (Dalpada), 119.  
  
 Kana, 34.  
 Keriahana, 143.  
 khandalana (Enthetns), 163.  
 kharavela (Tettigoniella), 4.  
 Khondana, 143.  
 kodaiana (Kolla), 9.  
 Kolla, 6.  
 kotagiriensis (Tettigoniella), 2.  
 Kutara, 42.  
  
 labecula (Menida), 141.  
 Lactistes, 116.  
 lacustrinus (Nysius), 182.  
 lætissima (Drabescus), 42.  
 læviventris (Tropicoris), 138.  
 lahorensis (Volusenus), 72.  
 Lampridius, 58.  
 lateralis (Aphanus), 198.  
 lateralis (Paralimnus), 62.  
 lateralis (Sciocoris), 125.  
 laterarius (Gulielmus), 127.  
 latiusculus (Hermolaus), 133.  
 latus (Blissus), 188.  
 latus (Lactistes), 116.  
 lebongensis (Coptosoma), 115.  
 lefroyi (Hecalus), 29.  
 lefroyi (Paralimnus), 63.  
 Leofa, 86.  
 lepida (Leptocorisa), 161.  
 Leptocerae, 171.  
 Leptocorisa, 161.  
 Leptocorixa, 161.  
 Lethæus, 202.  
 lethierryi (Agraphopus), 171.  
 leucoceras (Aphanus), 201.  
 leucoceras (Dieuches), 201.  
 levana (Daclera), 162.  
 lewisi (Elasmostethus), 149.  
 lewisi (Elasmucha), 149.



- lewisi (Paradieuches), 200.  
 liliputianum (Coptosoma), 114.  
 lineata (Elasmucha), 149.  
 lineata (Kolla), 10.  
 lineaticollis (Aliomorpha), 127.  
 lineatum (Elasmostethus), 149.  
 lineolata (Empoanara), 107.  
 lineosus (Aphanus), 198.  
 lituratus (Geocoris), 189.  
 Locutius, 192.  
 longitudinalis (Nirvana), 33.  
 longula (Anomiana), 109.  
 lugubris (Eutettix), 60.  
 lugubris (Mahalana), 64.  
 luteo-fasciatus (Sciocoris), 125.  
 lutescens (Parabolocratus), 31.  
 lutheri (Scotinophara), 151.  
 lutulentus (Geocoris), 188.  
 Lygaeidae, 179.  
 Lygaeosoma, 181.  
 Lygaeus, 179.  
 lynchi (Faenius), 14.  
  
 Macropes, 186.  
 macropictus (Corizus), 169.  
 Macrocytus, 118.  
 maculifrons (Kolla), 6.  
 maculosa (Chikkaballapura), 108.  
 maculosa (Penthimia), 21.  
 maculosus (Banus), 55.  
 Madates, 137.  
 Mahalana, 63.  
 Mainda, 11.  
 major (Eusarcocoris), 132.  
 majuscula (Penthimia), 18.  
 malacaius (Capys), 177.  
 Malichus, 24.  
 margheritæ (Mileewa), 13.  
 marginatus (Platyretus), 37.  
 marginifrons (Coptosoma), 111.  
  
 Maximianus, 79.  
 Megalomerium, 175.  
 melania (Dalpada), 119.  
 melanicens (Nysius), 182.  
 melanocephala (Penthimia), 16.  
 Melanotelus, 180.  
 Meloza, 166.  
 Menida, 141.  
 meridionale (Megalomerium), 175.  
 Metacanthus, 175, 178.  
 metallica (Aguriahana), 105.  
 Metochus, 200.  
 Mictis, 151.  
 Mileewa, 13.  
 militaris (Empoanara), 106.  
 militaris (Euacanthus), 11.  
 mimica (Kolla), 9.  
 mimicus (Hypselopus), 168.  
 minutus (Ootacamundus), 58.  
 modesta (Carraka), 41.  
 modesta (Kana), 36.  
 modesta (Mohnia), 29.  
 modesta (Sastragala), 148.  
 modestus (Camulus), 93.  
 Mohnia, 29.  
 montana (Ochrophara), 128.  
 montana (Penthimia), 17.  
 montandoni (Coptosoma), 151.  
 montandoni (Elasmucha), 150.  
 Mornioschema, 130.  
 mudonensis (Penthimia), 20.  
 Mukaria, 29.  
 multicolor (Nakula), 39.  
 multimaculatus (Corizus), 170.  
 mungphuensis (Kolla), 9.  
 Mycterizon, 145.  
 mysorensis (Fabulinus), 195.  
 mysorensis (Leofa), 86.  
  
 nagpurensis (Empoasca), 93.  
 Nakula, 39.  
 Nandidrug, 74.  
 nanulus (Cymus), 183.  
  
 nanus (Phrynomorphus), 51.  
 nasuta (Traiguma), 27.  
 nebulosa (Elasmucha), 149.  
 nebulosum (Elasmostethus), 149.  
 necopinata (Elasmucha), 149.  
 Neoaliturus, 63.  
 Neocarbula, 134.  
 Neodartus, 25.  
 Neodius, 126.  
 Neohoplomia, 159.  
 Neonevisanus, 121.  
 nepalensis (Aschistocoris), 157.  
 nepulensis (Aschistus), 157.  
 nepalensis (Sciocoris), 126.  
 Nephrotettix, 60.  
 Nezara, 140.  
 nigrellus (Euthetus), 164.  
 nigrescens (Prionaca), 138.  
 nigrifacialis (Deltoccephalus), 81.  
 nigripes (Tessaratomia), 147.  
 nigristigma (Crispina), 77.  
 nigrocapitatus (Adauctus), 195.  
 nigrofascialis (Kutara), 42.  
 nigrofusca (Sepontia), 131.  
 nigronitens (Eucosmetus), 191.  
 nigrorufa (Hotea), 116.  
 nigroscutellata (Empoasca), 93.  
 nilgirensis (Elasmostethus), 149.  
 nilgirensis (Elasmucha), 149.  
 nilgiriensis (Penthimia), 16.  
 nilgiriensis (Xestoccephalus), 55.  
 Ninus, 183.  
 Nirvana, 33.  
 nitida (Penthimia), 21.  
 nitidus (Brachyplatys), 110.  
 nitidus (Chilocoris), 119.  
 noctua (Gunhilda), 83.  
 noctua (Penthimia), 22.

notabilis (Lethæus), 202.  
 notatus (Allectus), 76.  
 notatus (Maximianus),  
 79.  
 noualhieri (Coptosoma),  
 115.  
 nutans (Scaphoideus),  
 65.  
 Nysiodes, 182.  
 Nysius, 181.

obesus (Goniagnathus),  
 43.  
 obscura (Podops), 116.  
 obscurus (Caystrus),  
 127.  
 Ochrochira, 151.  
 Ochrophara, 128.  
 ochrophara (Carvaka),  
 41.  
 olivascens (Phryno-  
 morphus), 52.  
 Omaranus, 5.  
 Ootacamundus, 57.  
 ootacamundus (Phryno-  
 morphus), 51.  
 Ophiuchus, 33.  
 opponens (Kolla), 9.  
 opulenta (Tambila), 23.  
 opulenta (Typhlocyba),  
 103.  
 orbicula (Coptosoma),  
 114.  
 orientalis (Agrophopus),  
 172.  
 orientalis (Anasida),  
 146.  
 ornatcollis (Homœo-  
 cerus), 156.  
 ornaticornis (Petillia),  
 154.  
 ornatula (Typhlocyba),  
 100.  
 ornatus (Aphanus), 199.  
 ornatus (Camulus), 97.  
 ornatus (Vulturinus), 26.  
 Orosius, 85.  
 Ossipaga, 185.  
 ostensum (Coptosoma),  
 112.  
 ostentus (Jassus), 49.

paganurus (Xestocephalus), 54.  
 paivana (Eupteryx), 97.  
 Paivanana, 95.  
 pallescens (Locutius),  
 193.  
 pallescens (Pisacha), 12.

pallescens (Pisachoides),  
 12.  
 pallida (Nirvana), 33.  
 pallidus (Carpocoris),  
 130.  
 pallifrons (Scaphoideus),  
 66.  
 pallipes (Paradieuchus),  
 201.  
 Pamera, 191.  
 Paraboloceratus, 30.  
 Paradieuchus, 200.  
 Paralimnus, 62.  
 pardalinus (Xestocephalus), 54.  
 parvipictus (Corizus),  
 168.  
 parvula (Adria), 127.  
 parvulus (Physomerus),  
 157.  
 Paternus, 71.  
 pauperculus (Jassus), 47.  
 pedestris (Leofa), 88.  
 Pendulinus, 157.  
 Pentatomidæ, 110.  
 Pentatominae, 119.  
 Penthimia, 16.  
 pertenerum (Megalo-  
 merium), 176.  
 Petillia, 154.  
 phæops (Cunedda), 46.  
 phasiana (Anoploc-  
 nemis), 153.  
 Phlepsius, 54.  
 Phricodus, 124.  
 Phrynomorphus, 51.  
 phycitis (Eutettix), 60.  
 Physomerus, 157.  
 picturata (Carvaka), 40.  
 picturata (Plautia),  
 136.  
 picturatus (Appolonius),  
 191.  
 picturatus (Homœo-  
 cerus), 155.  
 piens (Halyomorpha),  
 129.  
 Piezodorus, 140.  
 Pisacha, 12.  
 Pisachoides, 12.  
 Placosternum, 139.  
 Plataspidinæ, 110.  
 Platytretus, 37.  
 Plautia, 136.  
 plautioides (Antestia),  
 136.  
 Plinsachtus, 157.  
 Podops, 116.  
 Polycrates, 194.  
 polytretus (Geocoroides),  
 190.

porrectus (Parabolocera-  
 tus), 31.  
 porrectus (Scylax), 130.  
 Postumus, 84.  
 præculta (Mainda), 11.  
 prasina (Acropora), 39.  
 Prasutagus, 53.  
 Preta, 12.  
 Priassus, 138.  
 prina (Empoascanara),  
 94.  
 prima (Iterduca), 174.  
 primitiva (Pisacha), 12.  
 primitiva (Pisachoides),  
 12.  
 primus (Divitiacus), 59.  
 princeps (Ophiuchus), 34.  
 Prionaca, 138.  
 projectus (Bituitus), 71.  
 pronotalis (Corizus), 170.  
 pronotalis (Hypselpopus),  
 167.  
 pronotalis (Kolla), 8.  
 pronotalis (Macropes),  
 186.  
 Psilolomia, 161.  
 pulchellum (Coptosoma),  
 111.  
 pulchellus (Metacanthus),  
 178.  
 pulchellus (Prasutagus),  
 53.  
 pulcherrimus (Euthetus),  
 163.  
 pulchrum (Eurydema),  
 137.  
 punctata (Daclera), 162.  
 punctata (Elasmucha),  
 149.  
 punctatissimum (Copto-  
 soma), 112.  
 punctatum (Elasmo-  
 stethus), 149.  
 pundaluoya (Menida),  
 141.  
 punjabensis (Asylana),  
 124.  
 pusana (Æliomorpha),  
 128.  
 pusanus (Paternus), 71.  
 pygmaum, var. accensi-  
 tum (Coptosoma), 114.  
 quadrinotata (Penthi-  
 mia), 21.  
 quinquesmaculata (Chik-  
 kaballapura), 108.  
 radha (Empoasca), 93.  
 raja (Kolla), 7.

- rastellus* (Lactistes), 116.  
*recurva* (Elasmucha), 149.  
*recurvum* (Elasmostethus), 149.  
*redundans* (Scaphoideus), 64.  
*relatus* (Xestocephalus), 54.  
*replexus* (Euacanthus), 11.  
*robusta* (Canthecona), 147.  
*robustus* (Hermolaus), 132.  
*rubricundus* (Corizus), 168.  
*rubriplaga* (Khondana), 143.  
*rubriplaga* (Menida), 143.  
*rubrofasciata* (Varta), 44.  
*rubrofasciatus* (Piezodorus), 140.  
*rubronotata* (Empoasca), 92.  
*rubrostriata* (Typhlocyba), 102.  
*rubrovittata* (Chaubattia), 141.  
*rufipennis* (Geocoris), 189.  
*rufipes* (Macropes), 187.  
*rufispina* (Sastragala), 148.  
*rufuscula* (Typhlocyba), 103.  
*rugosus* (Neonevisanus), 122.  
*rugulosa* (Carbula), 133.  
*rusticus* (Paraboloratus), 31.  
*rutiloides* (Geocoris), 189.  
*rutilus* (Geocoris), 189.  
  
*Sabima*, 46.  
*sabulicor* (Coptosoma), 115.  
*sandaracata* (Tettigoniella), 4.  
*sanguinalis* (Leofa), 87.  
*sanguinalis* (Typhlocyba), 101.  
*sanguinariarius* (Cænocoris), 181.  
*sanguinolenta* (Eupteryx), 96.  
*Saontarana*, 122.  
*Sastragala*, 148.  
*Scaphoideus*, 64.  
*scapularis* (Penthimia), 21.  
  
*Seiocoris*, 125.  
*scutellata* (Elasmucha), 149.  
*scutellatum* (Elasmostethus), 149.  
*scutellatus* (Caystrus), 127.  
*scutellatus* (Neodartus), 25.  
*Scutellera*, 116.  
*Scuteller næ*, 116.  
*Seylax*, 130.  
*Sepontia*, 131.  
*Serinetha*, 132.  
*serratus* (Degonetns), 139.  
*servus* (Graptostethus), 179.  
*sexnotatus* (Oligenes), 197.  
*sexualis* (Didius), 36.  
*Shaddai*, 15.  
*siamicum, var. blandula* (Coptosoma), 114.  
*siamicum, var. orbicula* (Coptosoma), 114.  
*signata* (Kana), 34.  
*signaticolle* (Coptosoma), 111.  
*signatus* (Aspilocoryphus), 180.  
*singalensis* (Ninus), 183.  
*sinica* (Acestra), 162.  
*smaragdina* (Sastragala), 148.  
*solenopsides* (Chilocoris), 119.  
*solenopsides* (Chilocoristoides), 119.  
*sordidus* (Aphanus), 198.  
*sordidus* (Melanotelus), 180.  
*speciosum* (Nandidrug), 75.  
*speciosus* (Vulturinus), 27.  
*spectabilis* (Lampridius), 58.  
*spectra* (Tettigoniella), 3.  
*spectra* (Typhlocyba), 103.  
*spinousus* (Gonsalvus), 202.  
*spinulicollis* (Pendulinius), 157.  
*splendida* (Mukaria), 29.  
*stâli* (Oletus), 158.  
*steneosaura* (Vangama), 27.  
*Stenotoma*, 124.  
*sternalis* (Empoanara), 107.  
  
*stigmaticus* (Scaphoideus), 67.  
*straminea* (Typhlocyba), 104.  
*stramineus* (Drabescus), 42.  
*striicornis* (Homœocerus), 156.  
*subdecora* (Dalpada), 119.  
*suburneum* (Coptosoma), 115.  
*subfasciatus* (Corizus), 169.  
*subrotundus* (Geotomus), 118.  
*suffusus* (Tiarocoris), 111.  
*sulcatus* (Aschistocoris), 157.  
*sulcatus* (Aschistus), 157.  
*superbus* (Geocoris), 188.  
*suturalis* (Nirvana), 33.  
*sylvanella* (Tettigoniella), 3.  
  
*tabidus* (Cymus), 183.  
*Tambila*, 23.  
*taprobanensis* (Eusarcocoris), 132.  
*Taprobanus*, 173.  
*tauriformia* (Dalpada), 120.  
*tauriformis* (Elasmucha), 150.  
*taurus* (Compastes), 137.  
*tenebrio* (Anasida), 146.  
*terminalis* (Empoasca), 92.  
*Tessaratomia*, 147.  
*Tessaratominae*, 147.  
*tessellatus* (Coroticus), 45.  
*Tettigoniella*, 1.  
*Tettigoniellinae*, 1.  
*Thagria*, 44.  
*thalia* (Tettigoniella), 2.  
*thea* (Empoasca), 91.  
*Thebanus*, 197.  
*Therapha*, 172.  
*Thomsoniella*, 30.  
*thoracica* (Carvaka), 41.  
*thoracica* (Penthimia), 19.  
*Tiarocoris*, 111.  
*tibialis* (Polycrates), 194.  
*tigrina* (Kolía), 9.  
*Tolumnia*, 130.  
*tonsor* (Xyrophoreus), 152, 153.  
*Traiguma*, 27.  
*transversus* (Xestocaphalus), 55.

- Trebellius, 52.  
 tricolor (Geocoris), 188.  
 trimaculatus (Deltoccephalus), 83.  
 Tropistethus, 197.  
 truncatula (Elasmucha), 149.  
 Tropicoris, 138.  
 truncatulum (Elasmostethus), 149.  
 Typhlocyba, 99.  
 Typhlocybinae, 89.  
 typica (Neohoplotomia), 159, 160.  
 typicus (Angulus), 99.  
 typicus (Omaranus), 6.  
 typicus (Ootacamundus), 57.  
 typicus (Shaddia), 15.  
 typus (Nysiodes), 182.  
  
 Ujna, 13.  
 ulcerata (Cazira), 146.  
 unicolor (Leofa), 88.  
 uniformis (Polycrates), 194.  
  
 uniguttatus (Dieuches), 200.  
 uniguttatus (Metochus), 200.  
 unimaculata (Kolla), 7.  
  
 vallicola (Eurymenida), 142.  
 Vangama, 27.  
 variabilis (Penthimia), 18.  
 varicornis (Leptocoris), 161.  
 variegatum (Coptosoma), 114.  
 variegatus (Thyreocoris), 114.  
 variicornis (Leptocorixa), 161.  
 variolosa (Sepontia), 131.  
 varipes (Geocoris), 190.  
 Varta, 44.  
 ventralis (Eusarcocoris), 131.  
 versicolor (Dalpada), 119.  
  
 verticalis (Gessius), 39.  
 verticalis (Traiguma), 27.  
 vexillum (Gurawa), 28.  
 viridicans (Nandidrug), 75.  
 viridis (Thomsoniella), 31.  
 Viridomarus, 69.  
 vittatifrons (Penthimia), 17.  
 Volusenus, 72.  
 Vulturnus, 28.  
 vulturnus (Vulturnus), 26.  
  
 wellawayae (Menida), 142.  
  
 Xestocephalus, 54.  
 Xyrophoreus, 152.  
  
 Zizyphoides, 73.

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